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Virtual Nature: A practice-led enquiry into the relationship between painting and vernacular photography through the process of the painted monotype.

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Declaration of Originality

I, Leah Bullen

hereby declare that the thesis here presented is the outcome of the research project undertaken during my candidacy, that I am the sole author unless otherwise indicated, and that I have fully documented the source of ideas, references, quotations and paraphrases attributable to other authors.

VIRTUAL NATURE:

A practice-led enquiry into the relationship between painting and vernacular photography through the process of the painted monotype.

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Abstract

My practice-led research explores the relationship between painting and vernacular photography through the process of painted monotypes. This project has developed from an ongoing fascination with the visual qualities of photography and what happens when you translate photographs into other material forms, such as painting.

The aim of this project is to develop images that interrogate how painted monotypes provide a distinctive interpretation of embodied experience through their visual, material and sensory qualities. Today, like no other time in history, photography is embedded in our daily lives through hand-held devices and the interface of the digital screen. My research examines how this embedded experience of the photographic relates to the processes and visual qualities of the painted monotype.

The project is focused on three primary locations as subject matter: the aquarium, the botanical glasshouse and the habitat diorama. Through my research I explore how these sites function in optically and conceptually similar ways to the world of images, through shared notions of virtuality and indexicality.

This research is informed by the work of Édouard Vuillard, Mamma Andersson, Peter Doig, David Hockney and the landscapes of Gustav Klimt. These painters interrogate the territory between painting and lens-based images in very specific ways, relating to visual perception, embodied vision, figure and ground relationships, and visual textures.

In a theoretical context, my examination of the relationship between painting and photography has been motivated by the writings of Elizabeth Wynne Easton, Aaron Scharf, John Berger and Russell Ferguson; while Anne Friedberg, Rob Shields, Nicholas Mirzoeff, Geoffrey Batchen, Kris Paulsen and Johanna Love have been instrumental in determining a connection to the virtual and the index in my research.

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Figure 5. *A design for an aquarium mounted in handsome rustic-work,* (1857). From Humphreys, Henry Noel, *Ocean Gardens: The History of The Marine Aquarium* (London: Sampson Low, Son and Co. 1857), 34. Smithsonian Libraries. https://archive.org/details/oceangardenshist00hump (accessed 20 December 2017).

Figure 6. Fabrizio Morroia, *University of Copenhagen Botanical Garden,* (2005). https://en.wikipedia.org/wiki/File:Copenhagen_Botanical_Garden.jpg (accessed 20 November 2017).

Figure 7. *The Waterlily House interior, Kew Gardens,* built in 1852. Photo by the author, taken on fieldwork, 2016.

Figure 8. Advertising sheet showing various adaptations of Wardian cases for sale from Dick Radclyffe & Co. London, (c.1872-80). From Whittingham, Sarah, *Fern Fever: The Story of Pteridomania* (London: Frances Lincoln, 2012), 126.

Figure 9. Illustration of a Vivarium or Insect Home. From Humphreys, Henry Noel, *The Butterfly Vivarium or Insect House* (London: William Lay, 1858), frontispiece. Biodiversity Library Collection. https://archive.org/stream/CUbiodiversity1122113#page/n7/mode/2up (accessed 20 December 2017).

Figure 10. *Bird diorama,* Swedish Museum of Natural History, Stockholm. Photo: Daderot, (2014). https://commons.wikimedia.org/w/index.php?curid=42090219 (accessed 18 December 2017).

Figure 11. Illustration of a coral cabinet, (1706). Wood engraving on paper, dimensions unknown. Illustration from Vincent, Levinus, *Wondertooneel de Nature* (Amsterdam: François Halma, 1706). https://upload.wikimedia.org/wikipedia/commons/7/7a/Vincent%2C_Levinus_%281715%29_Wondertooneel_der_natuur_-Tome_2-_0295.jpg (accessed 17 November 2017).

Figure 12. Helen Paterson Allingham, *Gathering Ferns*, (1871). *The Illustrated London News,* July 1871. https://en.wikipedia.org/wiki/File:Pteridomania.jpg (accessed 20 October 2017).

Figure 13. Illustration from the magazine *Weekly Welcome,* (1879). From Brunner, Bernd. *The Ocean at Home: An Illustrated History of the Aquarium* (London: Reaktion Books, 2011), 104.

Figure 14. Emily Bowes Gosse, (unattributed), *The Plumose Anemone,* (1854). Chromolithography book illustration, dimensions variable. From Gosse, Philip, Henry. *The Aquarium: An Unveiling of the Wonders of the Deep Sea,* 2nd ed. (London: J. van Voorst, 1856), 186. Smithsonian Heritage Library, https://archive.org/details/aquariumunveilin00goss

Figure 15. Emily Bowes Gosse, (unattributed), *Plate V,* (1860). Chromolithography book illustration, based on watercolour, dimensions variable. From Gosse, Philip Henry, *A History of British Sea Anemones and Corals* (London: J. van Voorst, 1860), frontispiece. https://en.wikipedia.org/wiki/Philip_Henry_Gosse#/media/File:Philip_Henry_Gosse_-_British_Sea-Anemone_and_Corals_(Plate_V).jpg

Figure 16. Philip Henry Delamotte, *Crystal Palace, General view from the Water Temple,* (1854). Smithsonian Libraries. https://en.wikipedia.org/wiki/The_Crystal_Palace (accessed 20 December 2017).

Figure 17. Philip Henry Delamotte, *Interior view: Crystal Palace,* (1854). Photograph, albumen print from collodion negative, 23 x 27.9 cm. Collection of the Victoria and Albert Museum, London, UK. © Victoria and Albert Museum. http://collections.vam.ac.uk/item/O85633/interior-view-crystal-palace-photograph-delamotte-philip-henry/ (accessed 17 November 2017).

Figure 18. Philip Henry Delamotte, *The Great Nave, Crystal Palace*, (1854). Photograph, albumen print from collodion negative, dimensions unknown. Collection of the Victoria and Albert Museum, London, UK. © Victoria and Albert Museum. http://collections.vam.ac.uk/item/O128434/the-great-nave-crystal-palace-photograph-delamotte-philip-henry/ (accessed 17 November 2017).

Figure 19. Antoine François Jean Claudet, *Daguerrotype exterior of the Palm House, Royal Botanic Gardens Kew*, (1847). Dauguerrotype, dimensions unknown. Collection of the Royal Botanic Gardens, Kew, UK. © The Board of Trustees of the Royal Botanic Gardens, Kew.

Figure 20. *The Palm House, Kew Gardens* (2008). Photo: Jim Linwood. https://commons.wikimedia.org/wiki/File:The_Palm_House,_Kew_Gardens,_London.jpg (accessed 20 December 2017).

Figure 21. *Interior of the Palm house, upper level, Kew Gardens.* Photo by the author, taken on fieldwork, 2016.

Figure 22. Charles Rudd, *Fernery in Geelong Botanic Gardens*, (1892-1902). Photograph, print on paper, 13.6 x 20.5 cm. Collection of the State Library of Victoria, Melbourne, Australia. Image courtesy the State Library of Victoria. http://handle.slv.vic.gov.au/10381/183930 (accessed 17 December 2017).

Figure 23. Andrea Pozzo, *Glorification of Saint Ignatius,* (1691-94). Trompe l'oeil ceiling fresco in the nave of Sant'Ignazio di Loyola, Rome, Italy. Photo: Bruce McAdam, 2009. https://commons.wikimedia.org/wiki/File:Andrea_Pozzo_-_Apoteose_de_Santo_Inacio.jpg (accessed 15 December 2017).

Figure 24. Profile view of a habitat group design published in John Rowley, *Taxidermy and Museum Exhibition* (1925). From Wonders, Karen. "Habitat Dioramas: Illusions of Wilderness in Museums of Natural History," PhD thesis, Uppsala University, 1993, 146.

Figure 25. Visitor in front of Claude Monet's *Nymphéas,* Musée de l'Orangerie, Paris, France. Photo by the author, taken on fieldwork, September 2016.

Figure 26. *The Nesting Cliff diorama, exterior.* Natural History Museum, University of Oslo, Norway. Photo by the author, taken on fieldwork, August 2016.

Figure 27. *The Nesting Cliff diorama, interior.* Natural History Museum, University of Oslo, Norway. Photograph by the author, taken on fieldwork, August 2016.

Figure 28. *The Coral Reef Aquarium,* The Blue Planet Aquarium, Copenhagen, Denmark. Photo by the author, taken on fieldwork, August 2016.

Figure 29. Studio shot *The New World (Arecales),* showing the monotype being lifted off the plastic film, (2017). Photo: Tiffany Cole.

Figure 30. *The New World (Zingiberales)* (2017), watercolour and gouache monotype on paper, 95 x 73 cm, 2017. Photo: Brenton McGeachie.

Figure 31. *The New World (Poales)* (2017), watercolour and gouache monotype on paper, 95 x 73 cm, 2017. Photo: Brenton McGeachie.

Figure 32. *Wunderkammer* (2017), watercolour and gouache monotype on paper, 120 x 165 cm, 2017. Photo: Brenton McGeachie.

INTRODUCTION

Introduction

My practice-led research explores the relationship between painting and vernacular photography through the process of painted monotypes. This project has developed from an ongoing fascination with the visual qualities of photography and what happens when photographs are translated into other material forms such as painting.

This research questions how an engagement with the visual and material qualities of painting can explore the significance and implications of photography in contemporary culture. As both painting and photography are mediums of high complexity and variety, the relationship between them is similarly complex. I have therefore chosen to focus my research specifically on vernacular or everyday photography, bringing this genre into exchange with the material and visual qualities of painting. My engagement with vernacular photography is founded on an interest in the ways that visual technologies have become a part of our everyday lives. This has led me to explore how the material properties and the formal devices of painting can generate new ways of seeing and reflecting on the complexities of this visual world.

Initially, my research methodology explored a wide range of approaches to painting, experimenting with the material qualities of painting as a medium and tradition to transform and interpret photographs. Conceding that this was an overwhelmingly broad area, I came to focus on one particular painting process, the painted monotype. I found in the monotype a fascinating material and formal means of examining the relationship between painting and vernacular photography. This has led me to discover and develop original insights into visual, material, perceptual and sensory connections between vernacular photography and the painted monotype.

The word monotype comes from the Greek *monos* meaning one, and *typos* meaning impression.[1] The monotype is a single, unrepeatable imprint[2] from a painted or inked surface or plate. To produce a monotype, an image is painted or inked onto a surface, which is then transferred to another surface using pressure, resulting in one individual image and perhaps a second, faint impression.

1 Carla Esposito Hayter, *The Monotype: The History of a Pictorial Art* (Milan: Skira, 2007), 16.

2 Ibid., 17.

In the hierarchies of art history, the monotype has been a somewhat marginalised medium. Historically, the status of the monotype has been undermined predominately due to its unrepeatability, a perceived lack of technical skill needed for its production,[3] its historical rejection by printmakers,[4] and the ambiguity of its classification[5] which occupies a hybrid space between drawing, painting, and printmaking.

Within the vast range of art historical research on printmaking, the monotype itself has attracted comparatively little scholarship. As Thomas Middlemost argues, "The monotype has an almost invisible existence in general accounts of Australian Art and even in histories of printmaking."[6] Accounts such as Henry Rasmusen's *Printing with Monotype* from 1960, Kurt Wisneski's *Monotype/Monoprint* of 1995 and Julia Ayres *Monotype: Mediums and Methods for Painterly Printmaking* 1991, offer detailed technical approaches to monotype processes, while Carla Esposito Hayter's *The Monotype: The History of a Pictorial Art* 2007 delivers a comprehensive perspective on the monotype's European and American history. *Australian Monotypes* written by Thomas Middlemost in 2012 is the first definitive historical survey of the medium in Australia.

That the first major exhibition examining the history of the monotype, *The Painterly Print*, was not held until 1980,[7] attests to the generally low status the monotype has held until relatively recently. Technical manuals on printmaking prior to this formative survey mention the monotype only in a cursory way,[8] or even dismiss it completely.[9] *The Painterly Print* exhibition was highly influential, invigorating interest in the medium.[10] Since *The Painterly Print*, there have been few other comprehensive exhibitions solely focused on the monotype, except *Singular Impressions* in 1997, the first exhibition exploring the monotype in America. [11] There have however, been several major exhibitions and associated scholarship that specifically examine the monotypes of Hilaire Germain Edgar Degas, undoubtedly the most renowned

3 Thomas A. Middlemost, "Australian Monotypes" (PhD thesis, Australian National University, 2012), 1.

4 Ibid.

5 Ann D'arcy Hughes and Hebe Vernon-Morris, *The Printmaking Bible*. (San Francisco: Chronicle Books, 2008), 371.

6 Middlemost, "Australian Monotypes," 2.

7 Philippe de Montebello and Jan Fontein, "Foreword," in *The Painterly Print: Monotypes from the Seventeenth to the Twentieth Century*, Metropolitan Museum of Art (New York, NY) and Museum of Fine Arts, Boston. (New York: Metropolitan Museum of Art, 1980), vii.

8 Donald Saff and Deli Sacilotto, *Printmaking: History and Process* (New York: Holt, Rinehard and Winston, 1978), 348.

9 Jules Heller, *Printmaking Today: A Studio Handbook*. 2nd ed. (New York: Holt, Rinehart and Winston, 1972), 6.

10 John Ross, Clare Romano and Tim Ross, *The Complete Printmaker: Techniques, Traditions, Innovations*. Revised ed. (New York: The Free Press, 1990), 251.

11 Hayter, *The Monotype*, 192.

practitioner of the medium. These exhibitions include *Degas Monotypes* at The Fogg Art Museum in 1968, *Degas Monotypes* at the Hayward Gallery, London in 1985, and the recent comprehensive exhibition of Degas' monotypes at the Museum of Modern Art in 2016, entitled *A Strange New Beauty*.

The scope of existing literature on the monotype concentrates on the historical through exhibition catalogues or historical accounts; or the technical through exhibition catalogues or printmaking manuals. The interpretation and implications of the monotype's material, visual and sensory qualities remain largely absent from most discourse. The exhibition catalogue for *A Strange New Beauty* however, heralds a revitalisation of scholarship on the monotype and attempts to fill this gap. The introduction by Jodi Hauptman[12] and essays by Samantha Friedman[13] and Jonas Beyer[14] demonstrate a renewed engagement with the visual qualities of the medium and provide innovative readings, revealing a new currency of the monotype within contemporary visual experience. Through wider promotion, dialogue and understanding, the monotype is finding an assured place in the canon of art history, though the volume of scholarship on the monotype remains minor in comparison to the number of artists who work with the medium.

Since its popularisation by pioneers such as Edgar Degas and Camille Pissarro in the late 19th century, the monotype has fascinated a wide range of artists. In the 20th century, practitioners as diverse as Paul Gauguin, Margaret Preston, Milton Avery, Helen Frankenthaler, Richard Diebenkorn and Sidney Nolan have investigated the monotype's creative and visual possibilities. In contemporary art practice, artists including Eric Fischl, Elizabeth Cummings and William Kentridge continue to explore its visual potential. The monotype's ease of production, immediacy, hybridity and adaptability, once seen as a disadvantage in historical terms, are seen as highly desirable qualities in contemporary art practice, facilitating experimental approaches to making images.

As Middlemost's research highlights, many Australian artists both historical and contemporary have explored the monotype. While I acknowledge this history, the artists I have referenced are based on methodological choices rather than geographical ones. Specifically, I have chosen artists whose works question spatial ambiguity and explore connections with the photographic.

12 Jodi Hauptman, "Introduction," in *Edgar Degas: A Strange New Beauty*, ed. Jodi Hauptman, (New York: Museum of Modern Art, 2016), 12-19.

13 Samantha Friedman, "On Smoke," in ibid., 100-103.

14 Jonas Beyer, "Movement and Landscape," in ibid., 176-9.

The purpose of my research is to establish how the monotype may provide a distinctive means of reflecting on and interpreting contemporary visual experience through its material, perceptual and sensory qualities. Today, like no other time in history, photography is embedded in our daily lives through hand-held devices and the interface of the digital screen. My research interrogates how this embedded experience of the photographic can be related to, and manifested in, the processes and visual qualities of the monotype.

As photography and digital media are a ubiquitous and pervasive part of everyday life in the early 21st century, one of the key predicaments I faced from the beginning of my research was encapsulated in this statement by Russell Ferguson:

> For… contemporary painters, the photograph is so imbricated in the visual that the challenge has perhaps become less *whether* to deal with it than *how*. The question now is how to make a painting that is something other than a painted rendering of a photograph; how to transform a source image into something beyond illustration.[15]

In response to this statement, I formulated my research aims. First, I aimed to adopt a methodology for transforming photographic imagery through painting, while still speaking about photography's embeddedness in contemporary life. Second, I sought to experiment with techniques that could create a dialogue between photography and painting and explore the different ways they visualise the world. And third, I would examine how painted and handmade images offer a unique reading of embodied experience through their material, visual and sensory qualities.

As a historical context for this project, I have explored the possibilities that working from photographs has raised for painters in the past. I have concentrated this research around the 19th and early 20th centuries, when a negotiation between painting and the new invention of photography was paramount. The arrival of photography saw much critical debate surrounding the use of photography in art.[16] Famously derided by critics like Charles Baudelaire, photography was seen as a threat to the arts, and in particular to painting.[17]

15 Russell Ferguson, *The Undiscovered Country* (Armand Hammer Museum of Art and Cultural Centre, Los Angeles: University of California, 2004), 16.

16 Aaron Scharf, *Art and Photography* (London: Penguin Books, 1968), 26-28.

17 Ibid.

Many painters however embraced the medium either openly or in more clandestine ways, seeing its potential, like its predecessors the *camera obscura* and *camera lucida*, as a tool to help negotiate the image.[18]

At the same time that photography's pictorial authority for description began to displace painting's traditional role of depicting resemblance, the Impressionists and later generations of artists explored new ways to make images "where photography could not follow..."[19] Freed from the burden of strict representation, they rejected traditional approaches to finish and subject matter. They adopted a more painterly approach to surface, investigated colour relationships and observed the world around them. Less value was placed on traditional representation and greater significance was given to the experience of vision and the imagination. Ironically, there is much evidence to suggest that many of the Impressionists and later artists used photographs, but the compulsion to counteract photography's representational power transformed the history of Modern Art.[20]

Similarly, 19th century advances in the mechanical reproduction of images (including photography) also prompted experimental approaches to image making by artist-etchers. Wanting to distinguish their images with unique inking techniques, they reinvigorated interest in the individuality of prints, which led by extension to experimentation with the monotype.[21] For Degas, the most active practitioner of the monotype at this time, the connection between the monotype and the photograph holds a particular resonance, through shared visual and technical approaches. These include the transparency of materials, the ability to capture an instant in time, the imbrication of figure and ground relationships, and the ability to produce accidental visual qualities through happenstance.[22]

From this historical period, I will discuss Édouard Vuillard from the Nabis as particularly significant to this project for two reasons. The Nabi group were some of the first painters to use vernacular snapshots as the basis for paintings,[23] and rather than using the photograph to gain great visual acuity, Vuillard valued the snapshot for its incidental qualities and ambiguous spatial relationships.[24]

18 Ibid., 19-23.

19 E. H. Gombrich, *The Story of Art*, 13th ed., (Oxford; New York: Phaidon Press, 1978), 417.

20 For a detailed history of the impacts of photography on painting see Scharf, *Art and Photography*.

21 Eugenia Parry Janis, "Setting the Tone-The Revival of Etching, The Importance of Ink," in *The Painterly Print*, 18-22.

22 For an evaluation of the relationship between Degas' use of photography and the monotype see Carol Armstrong, "Degas in the Dark," in *Edgar Degas: A Strange New Beauty*, 36-45.

23 Elizabeth W. Easton, "Introduction," in *Snapshot: Painters and Photography, Bonnard to Vuillard*, ed. Elizabeth W. Easton (New Haven: Yale University Press, 2012), 3.

24 Elizabeth W. Easton, "Vuillard's Photography: Artistry and Accident," *Apollo*, 139, no. 388 (June 1994): 10-12.

In a contemporary context, photographic technology is an integral part of 21st century visual experience, and therefore many painters explore the relationship between photography and painting. Rather than focus on the more prominent figures within this field, such as Gerhard Richter and Luc Tuymans, I have chosen to base my research on painters who have directly influenced my studio processes: Peter Doig, Mamma Andersson and David Hockney, who specifically navigate a relationship with photography by exploring spatial ambiguity and a painterly approach to surface. Andersson and Hockney are also highly significant as they examine the instability of human vision and memory through painting and photo-collage.

Digital technology makes snapshot photography infinitely manipulable in comparison to vernacular photographs of the past. With image manipulation computer software or applications on smart devices, photographs can be easily filtered, duplicated, cropped and perfected. Digital devices also allow for vast numbers of photographs to be taken, processed, stored and shared almost instantaneously. This constant glut of imagery, condensed by the camera lens, has become the dominant way that we see the world, with our own human binocular system of vision marginalised by the camera's monocularity. In my research I explore how this rationalised system of monocular photographic vision can be explored and challenged through the perceptual, physical and material qualities of painting.

A significant original aspect of my research has been the development of my process and approach to water-based monotypes. While Paul Gauguin worked with water-based monotypes,[25] his monotypes are generally small, made predominately as exploratory studies in diaries, as quick sketches, or used to develop imagery for later paintings.[26] In my research, I have challenged the perceived limitations of the water-based process, developing a technique which has enabled me to execute the painting phase over a prolonged period of time. This has allowed me to explore the potential nuances of this technique to produce a series of monotypes as sustained and substantial works.

My project came to be focused on three primary locations as subject matter, the aquarium, the botanical glasshouse and the habitat diorama. My interest in the botanical glasshouse and aquarium started during my first year of research when I relocated to Sydney. In the context

25 Starr Figura, "Gauguin's Metamorphoses: Repetition, Transformation, and the Catalyst of Printmaking," in *Gauguin: Metamorphoses*, ed. Starr Figura, (New York: The Museum of Modern Art, 2014), 16.

26 Ibid., 26-28.

of city living these sites provided an outlet where I could experience and observe nature. At times these locations were quiet, contemplative spaces, but at others I was struck by numbers of tourists taking photographs on their smartphones and cameras. These digital screens seemed to curiously echo the window structures of the aquarium tank and the casements of the glasshouse. My fascination with habitat dioramas came slightly later, while researching the history of these locations. I explore how these sites function optically and conceptually, in ways resonant with the world of images, through shared qualities of virtuality and indexicality.

The index is a term used to denote a semiotic sign where the relationship between the signifier and the referent is based on cause and effect.[27] Thus photographs are considered indexical signs, as they are seen as trace impressions "… produced as a… consequence of being directly affected by the objects to which they refer."[28] The monotype also shares this indexical quality, with the monotype an indexical reference to the artist's body, an impression of the gestures of the image's own making.[29]

The virtual is a complex term, generally defined as "'*that which is so in essence*' but not actually so."[30] While the notion of the virtual in contemporary culture is often associated with the digital, my project also acknowledges historical forms of the virtual,[31] incorporating concepts of the potential, the perceptual and the imaginary.[32] Within this definition, images like paintings are defined as virtual spaces, as are the sites of my subject matter, which operate as virtual reconstructions of nature.

27 Jae Emerling, *Photography History and Theory* (New York: Routledge, 2012), 206.

28 Geoffrey Batchen, *Forget Me Not: Photography & Remembrance* (New York: Princeton Architectural Press, 2004), 31.

29 Hauptman, "Introduction," in *Edgar Degas: A Strange New Beauty*, 15.

30 Rob Shields, *The Virtual* (London and New York: Routledge, 2003), 43.

31 Anne Friedberg, *The Virtual Window: From Alberti to Microsoft* (Cambridge: MIT Press, 2006), 11.

32 Or Ettlinger, "Like Windows to Another World: Constructing a Systematic Typology of Pictorial Mediums." *Leonardo* 48, no. 3 (2015), 252.

The centrality of the photographic image in our experience of contemporary visual culture can be traced back to the information technologies and visual entertainments of the 19th century.[33] While art historian T. J. Clark asserts that 19th century technologies of spectacle were driven by commodity cultures,[34] and Jonathon Crary argues that mechanised sight results in a kind of passive auto-visuality,[35] the role of 19th century visual technologies as vehicles to negotiate the image cannot be overlooked.[36] I argue that the 19th century's "frenzy of the visible"[37] and engagement with the spectacle of nature, share connections to the sites of my subject matter and the everyday spectacle of photographic and mediating technologies in 21st century visual culture.

There are four areas that form the basis of my practice-led research: how painters have navigated relationships between photography and painting throughout art history and in contemporary practice; an investigation of the visual and perceptual qualities that the monotype and photography share; linkages between the monotype and the sites of my subject matter through the concepts of virtuality and indexicality; and the ways in which the monotype presents as an effective vehicle for reflecting on contemporary visual experience. It may seem that some of the concepts I discuss, principally those that engage with virtuality, indexicality and perceptual anomalies, might contradict one another. However, I would suggest this reflects the rich complexity of relations between painting and photography and that the body of work I have produced demonstrates the capacity of painting to encompass such paradoxes.

In summary, my research is informed by the work of Édouard Vuillard, Mamma Andersson, Peter Doig, David Hockney, and the landscapes of Gustav Klimt. These painters interrogate the territory between painting and lens-based images in very specific ways relating to visual perception, embodied vision, figure and ground relationships and visual textures.

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33 Vanessa R. Schwartz and Jeannene M. Przyblyski "Visual Culture's History: Twenty-first century interdisciplinarity and its nineteenth-century objects," in *The Nineteenth-Century Visual Culture Reader*, eds. Vanessa R Schwartz and Jeannene M. Przyblyski (New York; London: Routledge, 2004), 3.

34 T. J. Clark, *The Painter of Modern Life: Paris in the Art of Manet and His Followers* (Princeton: Princeton University Press, 1984), 9.

35 For an overview of Jonathan Crary's investigation of 19th century technologies of spectacle see Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge Mass: The MIT Press, 1990).

36 Isobel Armstrong, *Victorian Glassworlds: Glass Culture and the Imagination 1830-1880* (Oxford: Oxford University Press, 2008), 331.

37 Jean Louis Comolli, "Machines of the Visible," in *Electronic Culture: Technology and Visual Representation*, 1st ed., eds. Timothy Druckrey and Rosanne Stone Allucquère (New York: Aperture, 1996), 109.

In a theoretical context, my examination of the relationship between painting and photography has been motivated by the writings of Elizabeth Wynne Easton, Aaron Scharf, John Berger and Russell Ferguson; while Anne Friedberg, Rob Shields, Nicholas Mirzoeff, Geoffrey Batchen, Kris Paulsen and Johanna Love have been instrumental in determining a connection to the virtual and the index in my research.

In Chapter One I will contextualise my research, evaluating how painters have historically navigated a relationship with photography. Chapter Two provides a detailed account of my early experiments with monotypes and presents contemporary artists through whose work I contextualise my project. In Chapter Three, I outline the development and extension of my studio processes through the inclusion of photocopying and collage and the artists that have influenced my approach to these processes. Chapter Four examines the historical, visual and conceptual qualities of the sites of my subject matter and their connections to the contemporary world of images, specifically to the characteristics of the monotype.

CHAPTER ONE: MOTIVATION AND CONTEXT

2012-2013

Introduction

In this chapter I will identify key research questions and research areas that have driven the development of this project. I will also contextualise my research within the historical field, examining how photography has influenced painting from its beginnings, exploring the ways painters from the 19th century used photography to inform their practice. In particular, I will analyse relevant paintings by Édouard Vuillard, and consider how photography can influence painting in specific ways relating to pictorial space, visual perception and materiality. I will explain how these approaches have been influential in developing and expanding my own process of studio research. Additionally, I will evaluate how paintings and photographs are generated and operate in visual and material terms. I will demonstrate how these qualities have aided in defining the scope of my research as well as formulating approaches within the studio.

A broad research question that arose in the early stages of my project was: how might the painted image be considered relevant in a visual culture saturated with photographic images? Vanessa Schwartz and Jeannene Przyblyski argue that our 21st century understanding of visual culture is profoundly connected to, and shaped by, the "… mode[s] of perceptual/ cognitive experience that begins its lineage in the… entertainment and information technologies of [the] nineteenth-century… "[38] Given that the history of images within Western visual culture was fundamentally transformed by the invention of means of mechanical

38 Schwartz, "Visual Culture's History," 3.

reproduction, and of photography in particular, in the 19th century, my research question addresses how technological changes in photography impact on visual culture and experience today, and I compare my own reflections with those of 19th century painters who experienced the immense changes brought by early photographic practices.

In exploring how the experience of photography in contemporary culture might differ from earlier periods of history, I also sought to examine what advantages painters saw in photographic technology historically. And since the rise of Modernism, Abstraction, and the diverse practices of Post Modernism, given that there are so many possible approaches to painting, why do many contemporary painters choose to engage with photographs?

Another fundamental question that arose at this early stage was: how might the material and visual qualities and potentials of painting explore the relevance and the implications of photography for contemporary visual culture? This question raised several challenges in defining my project. Firstly, the term 'photography' represents a very broad scope of technologically mediated images in contemporary culture, therefore, what qualities within photographic images specifically fascinated me as a painter? Secondly, given the numerous painting methods I could adopt, how would I define my approach and methodology? Thirdly, to reiterate Ferguson's proposal that photography is so imbricated in the visual aspects of contemporary culture, how could I make paintings informed by photography which were not mere facsimiles of photographs, but which brought something more to these images? And finally, could I develop an approach to painting which would generate a unique and creative dialogue between these two different ways of seeing the world? To understand the complexities of relations between painting and photography it was essential to start from its beginnings, when the invention of photography in the 19th century changed the world of images.

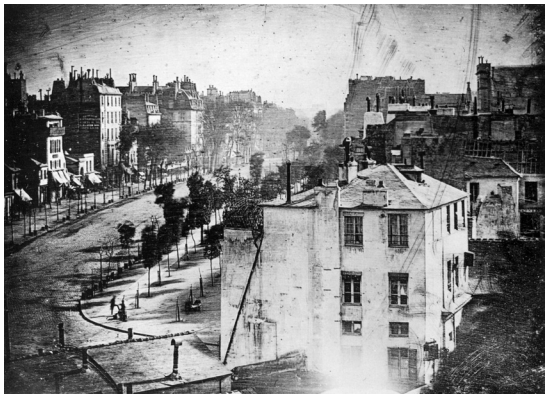

Figure 1. Louis Jacques Mandé Daguerre, *Boulevard du Temple, Paris* (1838).

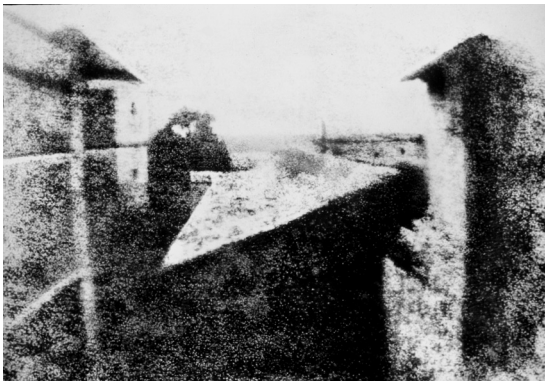

Figure 2. Joseph Nicéphore Niépce, *View from the Window at Le Gras*, (1826-27).

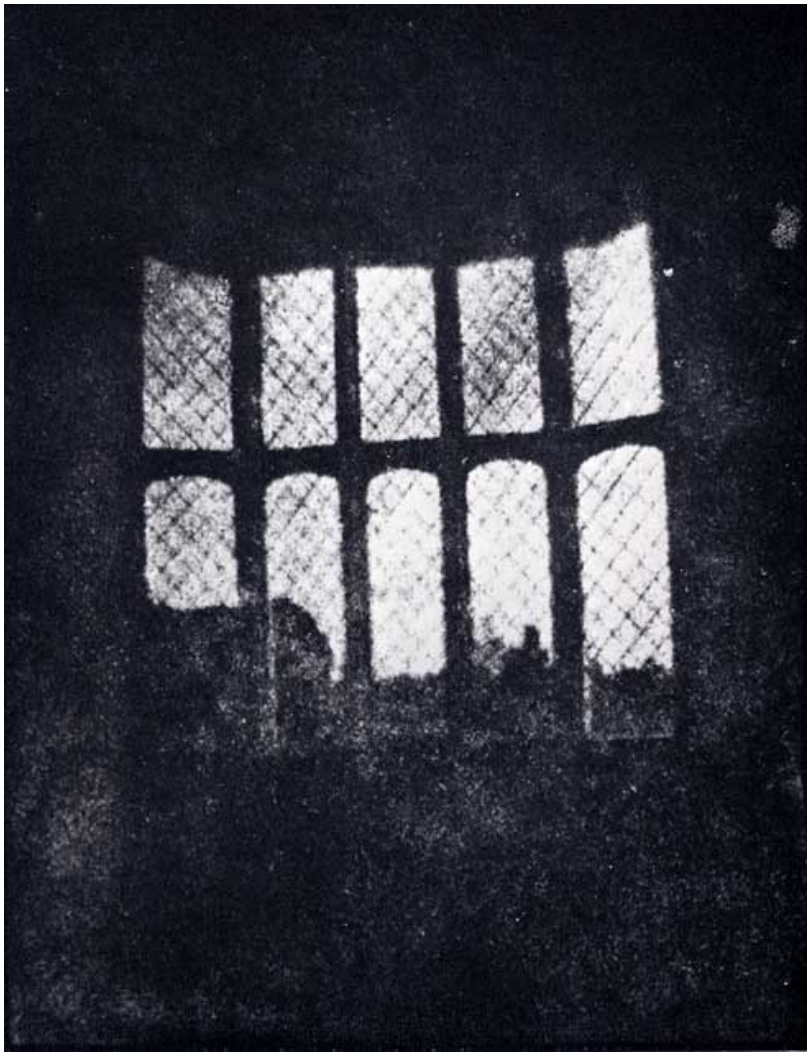

Figure 3. William Fox Talbot, *Window in the South Gallery of Lacock Abbey*. Positive image made from the original photographic negative (1835).

First Receptions to Photography

From the first forays into the photographic medium in the early 19th century by Louis Jacques Mandé Daguerre [39] (Figure 1), Joseph-Nicéphore Niépce[40] (Figure 2), and William Henry Fox Talbot[41] (Figure 3), intellectual and philosophical questions as to the proper use of photography and its influence on the arts were a source of vigorous debate.[42] It soon became evident that a negotiation between painting and photography was both paramount to the acceptance of this new technology of imaging the world, and the survival of a far older one.

The photograph's ability for capturing likeness and acute visual details both impressed and dismayed artists and critics at the time.[43] In 1840, the artist Thomas Cole wrote to a colleague:

> I suppose you have read a great deal about the Daguerreotype. If you believe everything the newspapers say, (which, by-the-by, would require an enormous bump of marvellousness,) you would… suppose that the poor craft of painting was knocked in the head by this new machinery… and [we have] nothing to do but give up the ghost.[44]

Paul Delaroche obviously thought photography's ascendancy absolute when, after seeing a daguerreotype for the first time, supposedly declared: "From today, painting is dead!"[45] Critic and writer Charles Baudelaire famously disparaged photography's influence on art, declaiming it to be art's "most mortal enemy."[46] However others, like the art critic Jules Janin[47] and the painter Eugène Delacroix,[48] believed that photography would be an indispensible working aid for the artist, citing it as being useful for correcting errors,[49] using it for the quick construction of images,[50] and to accurately reproduce earlier works of art[51] for reference.

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39 Daguerre made his first fixed images called 'daguerreotypes' around 1837, officially announcing his discoveries in Paris in 1839. See John Hannavy, *Encyclopedia of Nineteenth-Century Photography* (London: Routledge, 2013), s. v. "Daguerre, Louise Jacque Mandé," 365.

40 Niépce first captured an image he called a 'heliograph' on glass in 1826. See Helmut Gernsheim, *A Concise History of Photography*, 3rd revised ed. (New York: Dover, 1986), 9-10.

41 In 1840 Talbot fixed images using a salted paper that used a positive/negative principle, making the image reproducible. See ibid., 15.

42 Scharf, *Art and Photography*, 26-30, 143-154.

43 Ibid., 26-27.

44 Louis L. Noble, *The Course of Empire, The Voyage of Life and Other Pictures of Thomas Cole*, (New York: Cornish, Lamport, 1853), 282.

45 Hannavy, *Encyclopedia of Nineteenth-Century Photography*, s.v. "France," 546.

46 Scharf, *Art and Photography*, 145.

47 Ibid., 26.

48 Ibid., 119-125.

49 Ibid., 119.

50 Ibid., 26.

51 Ibid.

The Painter and the Photograph

Yet, from the earliest forms of photographic images to the later part of the 19th century, photography was generally the realm of the professional.[52] Taking photographs was a complicated and cumbersome activity involving heavy equipment: tripods, plates, bulky cameras, and a variety of chemicals and equipment to process negatives (Figure 4). When compared to the ease of drawing, the physical burden of this technology made it an easy target for satirists of the day (Figure 5). However, despite these technical drawbacks, many painters in the 19th century embraced photography. Eugène Delacroix and Pre-Raphaelite painter Dante Gabriel Rossetti adopted the medium eagerly, often working with professional photographers, posing models and orchestrating lighting, to create photographs for later use for paintings.[53, 54] (Figures 6, 7, 8, 9, 10, 11).

Photographic technology changed radically when Kodak released the first portable camera onto the market in 1888, with roll film a year later.[55] It was the first camera that was fully transportable and compact.[56] Once the film was finished, it was sent (still inside the camera) to a commercial processor, where the prints were developed, dispensing with the need for a darkroom.[57] Photography thus became much more accessible to amateurs[58] and the cultural phenomenon of the snapshot was born[59] and came to be adopted by many of the Post-Impressionists, including Nabi painter Édouard Vuillard, who I will discuss in detail later in this chapter.

52 Todd Gustavson, "Innovative Devices: George Eastman and the Handheld Camera," in *Snapshot*, 13.

53 Around 1853, Delacroix spent several sessions with photographer Eugène Durieu, helping pose models for photographs which Delacroix later used for paintings. See Scharf, *Art and Photography*, 119-125.

54 Carol Jacobi details how in 1865, Rossetti worked with professional photographer John Robert Parsons to create a collection of portraits of Jane Morris, which he used for a number of paintings over the following years. In the exhibition catalogue *Painting with Light* Jacobi gives the example of *Mariana* (Figure 8) and the associated photograph shown (Figure 9). This suite of photographs by Parsons is held in the collection of the Victoria and Albert Museum, and many other examples can be easily drawn between them and other Rossetti paintings, as I have found with another example, *Reverie* (Figure 10) held in the Ashmolean Museum and an albumen print by Parsons (Figure 11). See Carol Jacobi, "Whisper of the Muse" in *Painting with Light: Art and Photography from the Pre-Raphaelites to the Modern Age*, Carol Jacobi and Hope Kingsley (London: Tate Publishing, 2016), 82.

55 Gustavson, "Innovative Devices," in *Snapshot*, 15-17.

56 Easton, "Introduction," in ibid., 1.

57 Gustavson, "Innovative Devices," in ibid., 16.

58 Ibid., 13.

59 Ibid., 17.

Figure 4. Illustration of a dark room tent for wet collodion technique, (1875).

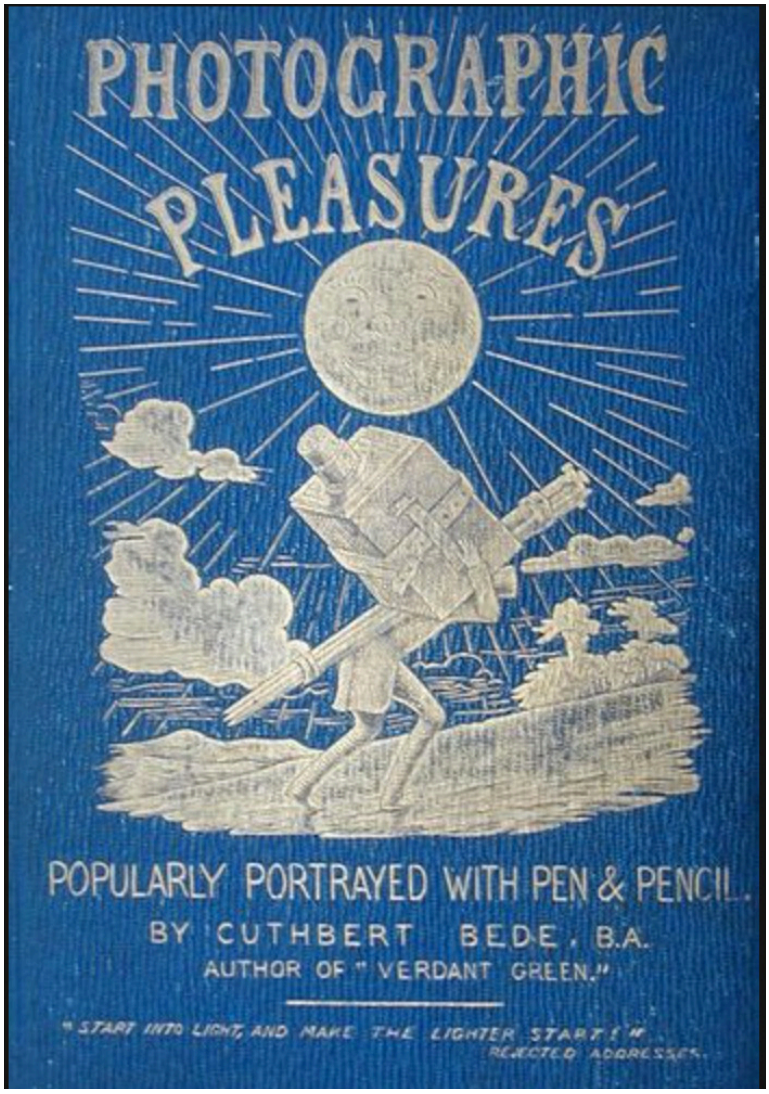

Figure 5. Cuthbert Bede, *Photographic Pleasures: popularly portrayed with pen and pencil*, (1855).

Figure 6. Eugène Delacroix, *Odalisque*, (1857).

Figure 7. Photograph of a female nude from the Delacroix album, (discovered in 1863).

Figure 8. Dante Gabriel Rossetti, *Mariana*, (1870).

Figure 9. John Robert Parsons, *Jane Morris, posed by Rossetti*, (1865).

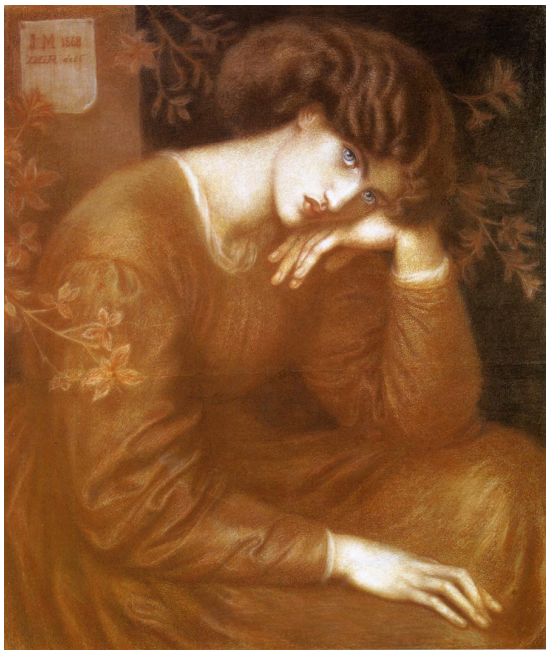

Figure 10. Dante Gabriel Rossetti, *Reverie*, (1868).

Figure 11. John Robert Parsons, *Jane Morris, posed by Rossetti*, (1865).

Photography in the 20th and 21st centuries

Over the course of the 20th century, camera and film technology improved and became more popular. Cameras and film became cheaper to buy, photographs became quicker to process, inexpensive to print and easier to take. Photographic processing expanded with the popularisation of colour photography with Kodachrome film in 1935;[60] followed by early Polaroid Land cameras offering quicker processing times around 1947.[61] The Polaroid camera SX-70 model of 1972 was a breakthrough; instantaneously ejecting the photographic print from the camera itself, enabling the viewer to watch it develop before their eyes.[62] In 1975, the first digital prototype camera was developed by Kodak,[63] with a professional model released into the market in 1991.[64] Over the following years, digital camera technology advanced, with the capacity to instantly display, store and delete images. With the added emergence of image manipulating software in 1990,[65] the photograph transcended its earlier role as an image of visual facts, and become infinitely malleable.

With the popularisation of the Internet in the 1990s, [66] digital communications and digital photographs merged into the online platform, and since then, photography has become more embedded in daily life than at any other time in human history. This saturation has been concentrated even further by the adaptation of the camera into personal devices, with the camera phone being launched in 1999,[67] causing camera sales and camera ownership to reach unprecedented levels.[68]

60 Colour photography existed from as early as the 1840s but, Kodachrome film revolutionised colour film as it used a single substrate. Todd Gustavson, *Camera: A History of Photography from Daguerreotype to Digital.* (New York: Sterling Innovation, 2009), 232-33.

61 Peter Buse, *The Camera Does the Rest: How Polaroid Changed Photography*. (Chicago and London: Chicago University Press, 2016), 8-9.

62 Ibid., 9.

63 Steven J. Sasson, "1975 Kodak Prototype Digital Camera," in Gustavson, *Camera*, 338.

64 Gustavson, *Camera*, 340.

65 Ibid.

66 Janet Abbate, *Inventing the Internet* (London and Cambridge Massachussetts: The MIT Press, 2000), 181.

67 Gerard Goggin, *Cell Phone Culture: Mobile Technology in Everyday Culture* (London and New York: Routledge, 2006), 144.

68 Michael Zhang, "This is what the history of camera sales look like with smartphones included." *Petapixel.com*, 9 April, 2015, accessed 20 December 2016. https://petapixel.com/2015/04/09/this-is-what-the-history-of-camera-sales-looks-like-with-smartphones-included/

Photographs from these personal devices can be uploaded and shared almost instantaneously on the Internet, creating an unparalleled volume of photographs existing in the digital format. In 2014, Mary Meeker's Annual Internet Trends Report stated that 1.8 billion digital images were uploaded to the Internet daily.[69] As Rose Eveleth declares: "Another way to think about it: Every two minutes, humans take more photos than ever existed in total 150 years ago."[70] Barely three years later, in December 2017, SRB Communications tweeted that this number had almost doubled, with a staggering 3.2 billion photos being uploaded daily to social media.[71]

Despite this omnipresence, I contend that, paradoxically, photographic images have almost ceased to be visible to us. In 1977, Roland Barthes observed, "whatever its manner, a photograph is always invisible: it is not it that we see."[72] In this statement, Barthes refers to the power of photography to connect the viewer to its referent, overwhelming the photographic object itself. Now, this statement takes on another layer of meaning: the spectacle of everyday photography has become essentially invisible because of its banality.

One and a half centuries on from the invention of photography, a combination of ubiquity and pervasiveness has led to photographic imaging becoming *the way* we see the world. Our own binocular system of sight is constantly obscured in a glut of imagery rationalised by the monocular vision of the camera lens and the mathematical sequences of digital technology. This digital realm seems to reiterate and intensify the issues photography initially raised at the turn of the 19th century, "… questions about transience, fragmentation of time and space… concepts of perception and codes of representation…"[73] With the continued impacts of photography on visual experience in the 21st century, it is evident why painters continue to engage within the medium: photography is part of our everyday experience, influencing our perceptual, visual, temporal and spatial understanding of the world around us. In order to unravel these relationships further, I determined to compare photographic and painted images.

69 Rose Eveleth, "How Many Photographs of You Are Out There in The World?" *The Atlantic*, November 2, 2015. https://www.theatlantic.com/technology/archive/2015/11/how-many-photographs-of-you-are-out-there-in-the-world/413389/

70 Ibid.

71 SRB Communications on Twitter, @SRBComm, December 19, 2017. https://srbcommunications.com/twitter/there-are-3-2-billion-photos-uploaded-to-social-media-daily-baltbizonline-smseminar/ (accessed 28 December 2017).

72 Roland Barthes, *Camera Lucida: Reflections on photography* (London: Vintage, 1993), 6.

73 Dorothy Kosinski, "Vision and Visionaries: The Camera in the Context of Symbolist Aesthetics" in *The Artist and the Camera: Degas to Picasso*, ed. Dorothy Kosinski (New Haven: Dallas Museum of Art, 1999), 14.

The Attributes of Paintings and Photographs

In this early phase of my research it was essential to distinguish the major differences between photographic and painted images to evaluate how these qualities affect the ways that these images are read. When photographic information is converted into painting, the image becomes profoundly altered in very particular ways: physical materials, material qualities, the evidence of the human hand through gesture, and the image's relationship to time.

The camera lens instantly captures a complete frame of visual information delivered directly to the viewer as a photographic image. The human eye and brain by contrast, collects separate, small bits of visual information, from which an understanding of the world is built up.[74] I therefore considered the ways painting from photographs could act as a hybrid model, bringing these two different ways of seeing into an active exchange.

I also considered the types of photographs I was most interested in and why. I was fascinated by the physical attributes of photos that occur by mistake or from poor resolution, such as pixilation, blurring and graininess. I was intrigued by the ways in which the quality of the photograph could drastically change in the printing process, how different printers could produce very different versions of the same photograph. While I recognised that these blurry or grainy qualities could be found in the work of Uta Barth, Thomas Ruff and many other photographers, for these artists, these qualities were conceptually defining,[75, 76] not a side effect of production. The kinds of photographs I wanted to paint from had these qualities precisely because they were conceptually 'dumb.' The qualities which interested me arose unintentionally, through chance or ineptitude. They were everyday photos, often what you might consider 'bad' photographs: out of focus, blurry, poor resolution, produced by a printer that was of poor quality, or had run out of ink. In their qualities, I recognised the potential for a physical correlation to the kinds of marks and textures that can be generated in paintings. Therefore, I identified that vernacular photography was the sub-genre of photography that was most suited to my project.

74 Simon Ings, *The Eye: A Natural History* (London: Bloomsbury, 2007), 134.

75 Nell McClister, "Uta Barth," *Artforum International* 44, no. 1 (September 2005), 304-305.

76 Robin Lenman *The Oxford Companion to the Photograph* ed. Angela Nicholson, (London: Oxford University Press, 2005), s.v. "Thomas Ruff," accessed 1 May 2016, http://www.oxfordreference.com/view/10.1093/acref/9780198662716.001.0001/acref-9780198662716-e-1349.

I started my studio research by collecting photographic images; my own snapshots, as well as vernacular images I found online via archives or search engines. When I compared paintings with vernacular photographs, I recognised several fundamental distinctions between photography and painting. These two modes of image making were materially distinct and involved very different processes. They were generated in different ways, and they had significantly different relations to time. To begin, I considered the material differences between paintings and photographs.

Materiality

In the simplest terms, paintings are made from coloured matter pushed around with an implement on a surface, whereas photographs are traces of light, from one particular moment of time, converted into an image. In a film camera this is achieved through a chemical reaction, and in a digital camera raw data is converted into units of information. Paint can be physically manipulated into varying consistencies and densities, allowing it to take on texture, built-up surfaces and marks as evidence of gesture and the actions of the artist's hand.

While photography also involves specific technical variables, vernacular photographs rely predominately on the manipulation of light and time through mechanical technology. Results vary according to the specific settings of the camera and nature of the lens. Most vernacular photographs also rely on mechanical technology as prints, through the action of a mechanical or digital printer. Printing involves variables of stock, ink, processing, paper type and surface quality (e.g. matte or gloss). Photographs can also be screen-based, viewed as coloured light emanating from a digital device. Paintings can take on and combine a whole range of surface qualities, for example combining gloss and matte finishes. The material variables of painting, such as translucency and opacity, have multiplied to include a whole range of material textures and metallic, opalescent and fluorescent effects. Painters can choose to mix these qualities into seemingly endless permutations. My research would involve bringing these different material processes into a meaningful exchange.

Mechanics and Embodiment

Photographs are produced by the manipulation of a monocular machine apparatus, whereas paintings are made via the human body. In a camera, traces of light register the image through a chemical reaction or by stimulating digital circuits. Everyday snapshot cameras are often called 'point and shoot' cameras. We look through screen or viewfinder, we line up the image, we push the button. Therefore, a photograph, unlike a painting, is not a translation of its subject, but a trace of it.[77] Susan Sontag describes the photograph as "… a trace, something directly stenciled off the real, like a footprint or a death mask."[78] This concept of the trace or the index became more influential as my research progressed, and is discussed in detail in Chapter 4, in relationship to my subject matter and to the monotype.

In contrast, paintings are made through an embodied action involving hundreds if not thousands of biological evaluations. This engages the complexities of our visual system through looking; the perception and processing of those inputs through cognition; and finally through voluntary and involuntary systems, converting those responses into physical action. This process also applies to other forms of making, such as drawing, or sculpting, where the body is the vehicle which makes the work. John Berger sums up this difference by asserting that hand-made images like paintings are translations, whereas photographs are received.[79] Another way these images differ is through their relationship to time.

Temporality

Due to their indexical nature, photographs are inevitably linked to time, whereas painting's relationship with time is more indeterminate. The still images caught by the camera capture the past, when the shutter was released, when the digital button was pressed, and bring that condensed moment into the present, into relation with the viewer now. Paintings however, have a more ambiguous relationship to time. For Ferguson painting "is always now"[80] but can equally "… slide between past and present, by being… something that exists decisively in the present, even if it simultaneously refers to the past."[81] For Siri Hustvedt, paintings seem to change the perception of time for the viewer, so that "… painting creates an illusion of an

77 Susan Sontag, *On Photography* (London and New York: Penguin Books, 1977), 154.

78 Ibid.

79 John Berger and Jean Mohr, *Another way of Telling* (Cambridge: Granta Books, 1989), 93-95.

80 Ferguson, *The Undiscovered Country*, 35.

81 Ibid.

eternal present, a place where my eyes can rest as if the clock has magically stopped ticking."[82] While photographic time is a single distilled moment, the sense of time contained within paintings is elastic, potentially encompassing references to the past, a continually unfolding present and endlessly becoming future.

The Embodied Mark

When considering the implications of translating a photograph into painted form, I reflected on how paintings as handmade objects can offer a distinctive interpretation of the world for the viewer through their material, visual and sensory qualities. Painted images are an embodiment of a process involving the human mind, eye and body. When we stand in front of a painting we are engaging with a physical and psychological record of its embodied production. As Hustvedt asserts:

> I have often thought of paintings as… spectres of a living body, because in them we feel and see not only the rigors of thought, but the marks left by a person's physical gestures—strokes, dabs, smudges. In effect, painting is the still memory of that human motion, and our individual responses to it depend on who we are, on our character, which underlines the simple truth that no person leaves himself behind in order to look at a painting.[83]

I thus rejected the idea of taking a Photo-Realist approach to my subject, eliminating evidence of the human touch or the marks of the brush. Rather, my first experiments specifically sought ways of accentuating material, painterly qualities through gestural marks and textured surfaces, employing these to differentiate my work from my flat, photographic sources. Since the term "painterly," or *malerisch* in German, was first coined by the art historian Heinrich Wölfflin[84] it has taken on new meanings and significance. Wölfflin originally used it to describe the Baroque effects of light, mass and shade in paintings, but today it is has been adapted to refer to works that overtly display brush-marks and the material substance of paint on the surface.

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82 Siri Hustvedt, *Mysteries of the Rectangle: Essays on Painting* (New York: Princeton Architectural Press, 2005), xv.

83 Ibid., xix.

84 Michael Clarke and Deborah Clarke, *The Concise Oxford Dictionary of Art Terms*, 2nd ed. (London: Oxford University Press, 2010), s.v. "painterly," 180, accessed 2 December 2016.

Early Experiments in the Studio

From the outset, my aim was to experiment widely with a range of materials and painting approaches including drawing, paint materials and techniques. This would lead me to discover innovative ways to engage with my source material. As a result, the work from this period consists primarily of small paintings, drawings and provisional paint studies, rather than highly finished works.

I began experimenting with painterly surfaces, testing the qualities of viscosity, surface and opacity. As a contrast to the smooth surface of the photograph, I investigated the ability of paint to hold a mark, or to have an evident texture as a malleable material applied by the artist's hand. (Figures 12, 13, 14).

I used acrylic and watercolour paints, trialling a similar approach with thinned oil paints. I diluted the paint into thin washes with water or mediums, pouring, dribbling and dabbing them onto different surfaces, such as paper, board and canvas, creating watery stains. Colours easily ran into one another. Depending on the surface and the viscosity, I had varying levels of control over the results.

I tested gel and wax mediums to increase the volume and viscosity of oil paints, spreading the paint on thickly, or piling it up on the surface into stiff peaks. Thick paint stayed wet and pliable for longer, so I could manipulate the paint on the support surface, blurring sections of paint or working wet on wet (Figures 15, 16). Different painting implements could produce distinctive marks on this raised surface, allowing me to incise into the paint with brushes, knives, rags, cardboard and cotton buds. Concurrent to these experiments, I considered how painters had negotiated a relationship with photography in the past.

Figure 12. *Afterness, (Lightener)*, (2012).

Figure 13. *Afterness, (Lightener)*, (2012), detail.

Figure 14. *Flopsy*, (2012-13).

Figure 15. *Afterness, (Fireflyer)*, (2012).

Figure 16. *Parklife*, (2012).

Historical Context

Many painters throughout the late 19th and early 20th centuries used photography in a highly staged way, controlling lighting and using models in the studio. I however concentrated my historical research around the Nabis, as I considered them highly significant to my research for two reasons. First, they engaged with a painterly approach to surface, which I had already identified as a governing principle in my own studio work. Second, the Nabis were some of the first painters to use vernacular photographs,[85] which I had also determined to use as my source material (Figure 17).

Figure 17. Pierre Bonnard, *Ker-Xavier Roussel and Édouard Vuillard in Venice*, (1899).

85 Easton, "Introduction," in *Snapshot*, 3-5.

The Nabis

Photography's authority for pictorial description prompted the Impressionists and later groups such as the Nabis, to negotiate new ways to approach painting. In 1890, Maurice Denis declared "… that a picture before being a warhorse, a nude or any other anecdote, is essentially a flat surface covered with colours in a certain order,"[86] a statement which has come to describe the entire motivation of the group. In the paintings of Édouard Vuillard and Pierre Bonnard the physical description of figures, interiors and landscapes; the shapes, organisation and repetition of colours and patterns, as well as the painterly approach to surface, demonstrates that the Nabis were not engaged with creating conventional depictions. Rather, they were primarily interested in creating new visual relationships between paint as material, surface, colour, gesture and shape; in short, as an ordered arrangement of elements on a flat surface (Figures 18, 19). Many of these visual attributes of the Nabis' paintings have been linked back to the qualities of photography, specifically the hand held Kodak camera.[87] Artists within the group such as Vuillard, Bonnard and Vallotton all used early portable cameras, documenting the people and places in their everyday lives and responding to the spontaneous visual effects this kind of photography could generate.

Félix Vallotton's peculiar realism was highly influenced by the unique visual characteristics of the early Kodak camera.[88] His paintings often exhibited exaggerated sharp contrasts, linked to the incidental effects of overexposure,[89] and competing visual foci, derived from highly contrasting darks and lights in his source photographs[90] (Figures 20, 21).

For Bonnard, the snapshot was a way of capturing a spontaneous moment, a split second of lived experience.[91] Eik Kahng asserts that Bonnard may have been attracted to photography due to his goal of wanting to remain faithful to the "first idea" of the motif.[92] The camera also allowed Bonnard to explore incidental angles in composition,[93] while the camera's lighting effects and grainy textures often obscured details, anonymising the figure or landscape into an organisation of tonal shapes and forms, which he could explore in paint through imaginative

86 Maurice Denis quoted in Stuart Preston, *Edouard Vuillard* (London: Thames and Hudson, 1985), 19.

87 Easton, "Introduction," in *Snapshot*, 1-11.

88 Eik Kahng, "Félix Vallotton's Photographic Realism," in Kosinski, *The Artist and the Camera*, 227.

89 Ibid., 230.

90 Ibid.

91 Eik Kahng, "The Snapshot as *Vanitas*: Bonnard and His Kodak," in Kosinski, *The Artist and the Camera*, 240-1.

92 Ibid., 241.

93 Ibid.

Figure 18. Édouard Vuillard, *Repast in the Garden*, (1898).

Figure 19. Pierre Bonnard, *Woman with a Dog*, (1891).

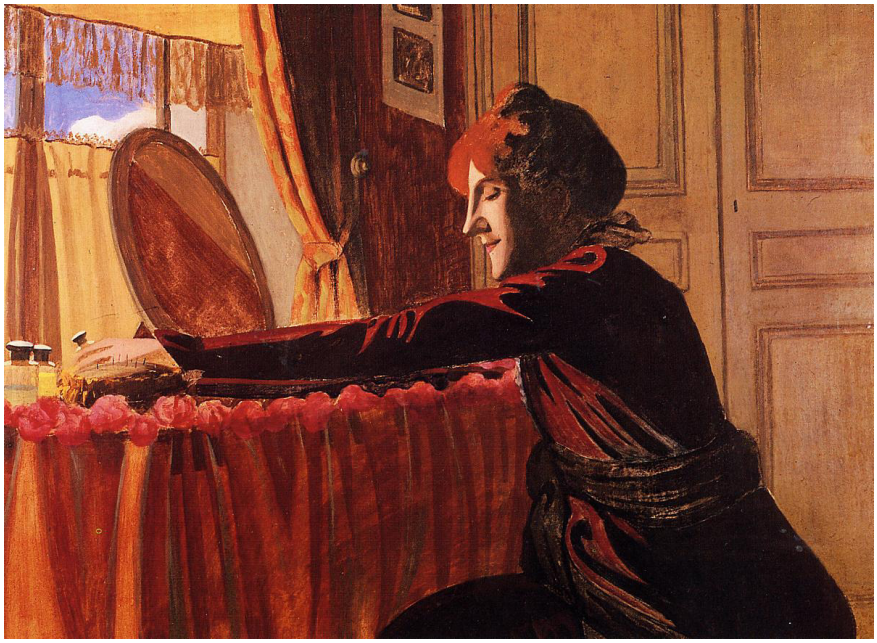

Figure 20. Félix Vallotton, *Madame Vallotton at Her Dressing Table*, (1899).

Figure 21. Félix Vallotton, *Gabrielle Vallotton Manicuring her Nails*, (1901).

colour (Figures 22, 23). Like Vuillard, Bonnard used his photographs predominately as a memory bank of ideas, poses and compositions, synthesising and editing motifs together to construct his paintings.

While Félix Vallotton, Pierre Bonnard and Édouard Vuillard all became amateur photographers, owned early portable cameras,[94, 95, 96] and referred to these images for some of their paintings, I found that the approach of Vuillard related most to my research.

Figure 22. Pierre Bonnard, *Family in the Garden*, (1901).

Figure 23. Pierre Bonnard, *Andrée Terrasse, a child at her side and, in the background, Renée*, (1899-1900).

94 Françoise Heilbrun, "Pierre Bonnard's Amateur Photographs: A Poetic, Dancing World," in *Snapshot*, 62.

95 Elizabeth W. Easton, "Edouard Vuillard's Photography and the Limitations of Truth," in ibid., 191.

96 Kahng, "Félix Vallotton's Photographic Realism," in *The Artist and the Camera*, 227.

Édouard Vuillard – Painting and Vernacular Photography

Inspired by Gauguin's teachings on the value of the "imagination over observed reality,"[97] Vuillard chose to explore and exploit the unexpected accidents, distortions and casual nature of early photography, rather than its ability to capture objective reality. Elizabeth Easton argues that it is somewhat ironic that the ability of photography to deliver greater visual accuracy was subverted by the Nabis and Vuillard.[98] Vuillard created works that intentionally rejected representational precision, and instead embraced spatial ambiguity.[99] I argue that this engagement with a textured and painterly approach to surface, was both a counterpoint to the flat surface of the photographic print, and a materialised response to the visual textures, light, blurring, graininess and exposure effects of early photography.

Vuillard became an avid photographer sometime during the late 19th century (Figure 24). It is well documented that he was experimenting with photography by 1897 and that he owned an early model Kodak portable camera from that date.[100] To understand the full implications of photography on Vuillard's oeuvre however, I examined specific paintings to evaluate how photography may have influenced his approach.

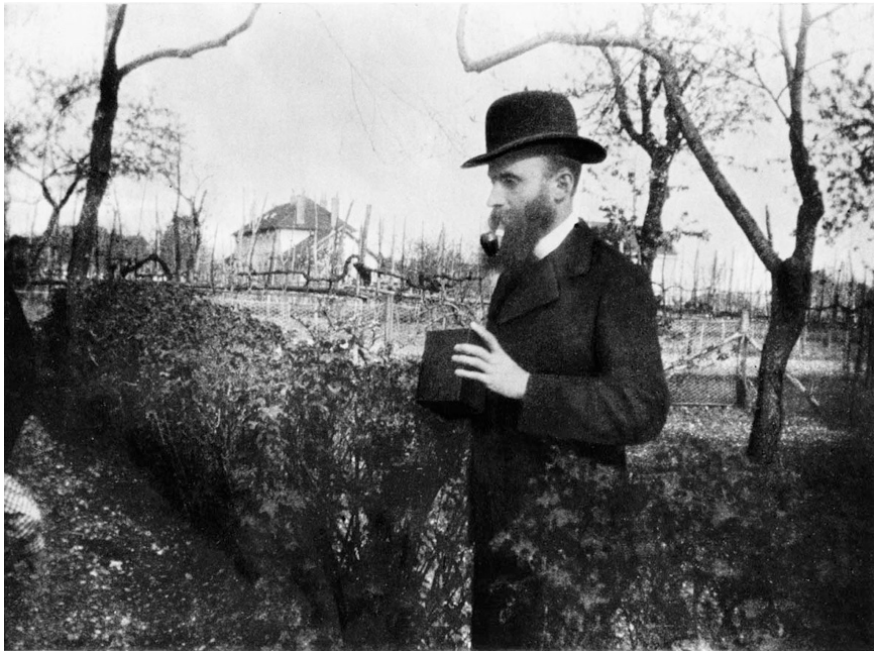

Figure 24. Pierre Bonnard, *Vuillard holding his Kodak camera*, (Spring 1900).

97 Easton, "Introduction," in *Snapshot*, 2.

98 Easton, "Vuillard's Photography: Artistry and Accident," 10.

99 Elizabeth Wynne Easton, *Intimate Interiors of Edouard Vuillard* (Houston: The Museum of Fine Arts, 1989), 30.

100 Guy Cogeval in Guy Cogeval, Kimberly Jones, Laurence des Cars, MaryAnn Stevens, Dario Gamboni, Elizabeth Easton and Mathais Chivot, *Edouard Vuillard* (New Haven: Yale University Press, 2003), 241.

Photographic Synthesis

When examining the work of painters that utilise photographs, direct correlations between the photograph and the painting can be easy to detect, as we have seen in the previous examples of Delacroix or Rossetti. With Vuillard however, the influences of photography are not immediately apparent. Though some paintings show direct photographic references, such as *The Haystack*[101] (Figure 25), what this example also reveals, is that Vuillard often utilised more than one photograph as source material for a single painting. In *The Haystack*, the central male figure has been taken from one photograph (Figure 26) and merged into the haystack scene (Figure 27).

Vuillard also used a similar approach in his paintings of domestic interiors, most of which are based around the Vuillard home, which doubled as his mother's corsetry and couture business premises.[102] In both Vuillard's photographs and paintings of the domestic realm, we see a repetition of common activities: work, reading, dining; as well as domestic details: patterned walls, decorative textiles, screens and architectural features. We also see a recurrence of familiar figures: his mother, his sister Marie, seamstresses, as well as friends and colleagues. Vuillard utilised his collection of photographs of these interiors as a reference from which he could synthesise elements together. While Vuillard painted many interiors prior to 1897 (the year from which he is known to have owned a camera), there are identifiable elements from his photographic archive[103] that are echoed in the paintings after that date. For example, the background of the photograph showing *Misia Natanson seated on a chaise lounge*, (1899) (Figure 28), is the same background as in the *Woman in Blue with Child*, (Figure 29) of the same year. Similarly, the figure of Thadée Natanson in *Misia and Thadée Natanson* (Figure 30) seems to echo the figure on the left in *Interior*, (Figure 31).

I suggest this photographic archive was for Vuillard, a kind of memory bank, a compendium of recollections that, as he once wrote, could "awaken a host of memories,"[104] from which to draw upon for paintings. A detailed examination of *The Blue Sleeve* however, reveals deeper associations to photography relating to space, texture, and figure and ground relationships.

101 Cogeval, *Edouard Vuillard*, 242.

102 Easton, *Intimate Interiors*, 26.

103 Most of this photographic archive is still in the hands of Vuillard's direct heirs. It is estimated to contain over 1,750 photographs. The full implications of this archive on his painting practice may yet to be revealed. See Cogeval, *Edouard Vuillard*, 240.

104 Direct quote from Vuillard's journal entry of 1939, cited ibid., 242.

Figure 25. Édouard Vuillard, *The Haystack*, (1907, reworked in 1938).

Figure 26. Édouard Vuillard, *Tristan Bernard and on the right Lucy Hessel, Normandy*, (1907).

Figure 27. Édouard Vuillard, *Lucy Hessel and Marcelle Aron in front of a haystack in Amfreville*, (1907).

Figure 28. Édouard Vuillard, *Misia Natanson seated on a chaise lounge, Rue St. Florentin*, (1899).

Figure 29. Édouard Vuillard, *Woman in Blue with Child*, (c.1899).

Figure 30. Édouard Vuillard, *Misia and Thadée Natanson* (c.1899).

Figure 31. Édouard Vuillard, *Interior*, (1902).

Case Study: The Blue Sleeve

While I maintain that Vuillard's unique approach to surface and pattern was informed by the visual textures of photography, there is also evidence that early photographic 'faults' and spatial distortions intrigued him. This can be demonstrated when considering the *The Blue Sleeve* from 1893 (Figure 32). While no current evidence exists that Vuillard owned a camera when *The Blue Sleeve* was painted, both Guy Cogeval and Easton assert that it has strong photographic qualities.[105] It can be reasonably assumed that when this painting was made, Vuillard was already very familiar with photography, experiencing it in his daily life through newspapers, magazines, periodicals,[106] and via friends and colleagues, even if he did not own a camera himself until a few years later.

The Blue Sleeve is a portrait of Vuillard's sister Marie. Small and in portrait format, it shows Marie seated in the foreground at a table, her body twisting around in the seat to look back over this arm and shoulder at the viewer. Marie's figure fills the front of the picture plane, the blue sleeve of the dress looming large. This is one of the most noticeable features of this work, the magnified size of the figure in the foreground. Marie is disproportionately large compared to the size of the seamstress from the Vuillard family business in the background,[107] who is about half her size. Easton comments that this exaggeration of the figure is typical of the kind of spatial distortions evident in cameras of the time.[108]

The Kodak camera, unlike other cameras, was held at waist height and this often led to unexpected angles, blurring or distortions to be produced, especially with movement, as the lens viewfinder was not an easy thing to judge.[109] In *The Blue Sleeve,* the size of Marie's body would seem to mirror a distorted camera angle, such as Vuillard's photograph of Marie, Ker-Xavier and Annette taken some years later, where the figures in the foreground look overly large and distorted (Figure 33). Vuillard's radical exploration of pictorial space in *The Blue Sleeve* is evident when compared to other paintings of the time such as *Portrait of Madame Le Doux* by Vlaho Bukovac (Figure 34), which was accepted into the Paris Salon of the same year.

105 Cited by Kimberley Jones, in ibid., 151.

106 Hannavy, *Encyclopedia of Nineteenth-Century Photography*, s.v. "History 7: 1880s," 698.

107 Cited by Jones, in Cogeval *Edouard Vuillard*, 151.

108 Ibid.

109 Easton, "Introduction," in *Snapshot*, 3.

Figure 32. Édouard Vuillard, *The Blue Sleeve*, (1893).

In Bukovac's painting there is a sense of a three dimensional space, rendered onto a two dimensional plane. This illusionistic depiction, in a full-length, life-size portrait format, shows Madame Le Doux standing in three-quarter pose in a sunlit garden. While there is a tendency toward more painterly brush marks in this Post-Impressionist period, the figure is rendered as a volume, modelled by light, and clearly delivers an individual likeness.

This high degree of attention to detail could in fact have been aided by the use of photography. It is well documented that from as early as the 1840s many portrait painters adopted photography and daguerreotypes as tools for visual accuracy. [110, 111] Whether the *Portrait of Madame Le Doux* was painted with or without the aid of photography is unknown. But where Bukovac's portrait displays visual acuteness, in contrast, Vuillard broadly generalises his figuration.

The facial details of the two figures in *The Blue Sleeve* are indistinct and simplified, described in patches of light and dark, like a mask. The shape of brow, eyes, nose and mouth are alluded to, but they are strangely distorted by shadows. These qualities are evocative of photographic blurring, typical in early photography, when shutter speeds required people to remain still for longer (Figure 35). The light effects in early photographic techniques could also simplify and abstract forms, as demonstrated by Degas' *Dancer Adjusting Her Shoulder Strap* (Figure 36). Here, the tonal information has been reduced so that the figure is rendered in flattened shapes of dark and light. Marie's face is just such an arrangement, and is anonymised as a pattern of shapes.

Marie is placed in an unlikely pose for a long portrait sitting. Rather, she has been captured in the act of turning around, perhaps to enter a conversation going on behind her, or swivelling around to the sound of her name. It is moment observed as an arrested gesture, casual, brief, like an image caught by a camera.

For Vuillard, photography was a way of flattening space and creating spatial ambiguity.[112] The newspaper in the bottom left corner of the painting is cut by the edges of the frame, a device likely borrowed from or inspired by photographic cropping. The newspaper thus becomes a flattened shape, a pale triangle at the front of the picture plane which seems to be both advancing forward and sitting on the surface as a flat shape.

110 Scharf, *Art and Photography*, 49, 52, 55-56.

111 Van Deren Coke, *The Painter and the Photograph: from Delacroix to Warhol* (Albuquerque: University of New Mexico Press, 1969), 19-57, 79, 193.

112 Easton, "Vuillard's Photography: Artistry and Accident," 10.

Figure 33. Édouard Vuillard, *Ker-Xavier, Annette, and Marie Roussel in Levallois*, (1898).

Figure 34. Vlaho Bukovac, *Portrait of Madame Le Doux*, (1892).

Figure 35. Unknown photographer under the direction of Charles Spurgeon Jr, *Rabbit Seller*, *London*, (c.1884-87).

Figure 36. Hilaire Germain Edgar Degas, *Dancer Adjusting Her Shoulder Strap*, (1895).

Another example of this spatial ambiguity can be seen when considering the dark lamp at the top of the painting. This rectangular navy/black shape joins with Marie's head, like a false attachment in photography. False attachments form through the photographic compression of space whereby objects in the foreground and background of an image appear to meet and occupy the same plane. It often occurs when objects of the same tone or colour sit next to each other in the picture space, and meld into a complex form (Figure 37). In the case of the lamp, we are unsure as to its nature or where it sits in space. It could be a ceiling lamp, directly above Marie's head, or a table lamp with a dark shade sitting on a shelf behind her, with the base camouflaged in the painterly marks of the wall. Visual complexities such as false attachments, radical foreshortening, spatial deformations, blurring or motion in photographs were perhaps what Delacroix was alluding to when he stated, that daguerreotypes displayed "monstrosities."[113] Vuillard however, savoured such anomalies in early photography as they allowed him to explore imaginative ways of making paintings. Through these spatial distortions, and a combination of patterning, dabbing and tonal interplay, Vuillard invented pictorial spaces where figure and ground relationships become ambiguous, interconnected and interchangeable.

Figure 37. Example of false attachment, TV screen grab, Rupert Murdoch with devil horns, (19 July 2011).

113 Scharf, *Art and Photography*, 120.

Further Studio Research

During this next phase of my research, while I used some snapshots from my own photographic archives, most of my source material photographs came from mining the Internet for vernacular images. Reflecting on my choices of source photographs, they usually contained spatial or visual peculiarities: textural static, blurs, false attachments or visual glitches, which I recognised were similar to the kinds of photographic visual anomalies that so engaged Vuillard.

At this stage of my project, the themes I chose to paint could broadly be described as an uncanny theatre of the world: everyday images, of seemingly everyday situations, though with something slightly amiss. In most of my source photographs, there was an inherent strangeness, a figure oddly dressed for a situation, wild animals interacting with humans, figures and objects melding together through false attachments, which made the images slightly eerie. I came to think of these elements as a kind of spatial or temporal collage, where the fantastic or ridiculous could be captured by the camera in the most ordinary of settings.

I started working with these images by making sequential studies, creating several versions of images by drawing or painting sketches. In many of my drawing studies, I would work from the last study to generate the next (Figure 38). With each new iteration I changed parts of the image, sometimes modifying colour relationships or compositional elements. At other times I used different techniques to edit the image through over-painting, or over-drawing and/or collage (Figures 39, 40, 41).

While working in this way, I reflected that photography was inevitably linked to my process for several reasons relating to time. Like Vuillard, I was interested in the kinds of visual anomalies that photography can generate or capture. These visual glitches occur often due to happenstance, for example, a figure may walk into the line of the camera lens and be photographed by accident, or on a micro level, photography can capture things unseen by the naked eye. The camera can also register data with unforeseen results. Take for example again the spatial compression that causes false attachments, like in Vuillard's *The Blue Sleeve*. With real time vision our brains do not necessarily notice these irregularities. Human brains and

Figure 38. Sequential drawing studies, (2012-13).

Figure 39. Over-painted photograph, (2012).

Figure 40. Working image for *Surrogate* from visual diary, (2013).

Figure 41. *Surrogate*, (2013).

eyes have evolved to scan, to check for danger through processes such as pattern recognition, as a survival instinct,[114] and so we see things in a broad sense. Often our eyes and brains can fail to see what the camera will mechanically deliver.

Additionally, camera technology delivers visual data, processed as prescribed units such as the pixel or the dot matrix. The monocular photographic lens and the digital screen have broken vision down into data and that has created particular ways of seeing the world. Mathematical algorithms allow images to be processed into sections of tone, easily observed in exaggerated examples such as low-resolution screen grabs or with Photoshop filters.

In response to this, I started making drawings using a projector or by tracing over images so I could see these basic tones as discrete shapes. This in turn, allowed me to see how lozenges of colour from low-resolution imagery might make up broader images. I saw these lozenges as relating to a unit, or a unit of mark, and equated them to the unit of mark I could generate from my paintbrush or in my drawings with chisel shaped markers to replicate this idea of units of colour or visual data (Figure 42).

And finally, screen-based photography prompted me to think about my approaches to pictorial space. Screen images seem to have a simultaneous depth and flatness. They were flat on the surface but with an illusionary depth, combined with radiating light and a flickering shimmer from the screen. I started experimenting with glitter, opalescent and iridescent pigments interleaved with layers of translucent paint and ink markers to imitate this (Figure 43, 44). I found that the opalescent pigments seemed to flatten the image, but when put into thin layers they seem to push an image further back into the picture space, so this technique of using many layers to produce a deeper space was something I wanted to pursue as I saw it as a way to generate an oscillating sense of space.

114 Iain McGilchrist, *The Master and his Emissary*, (New Haven: Yale University Press, 2009), 47.

Figure 42. *Diorama study*, (2012-13).

Figure 43. *Aquatic diorama study*, (2012-13).

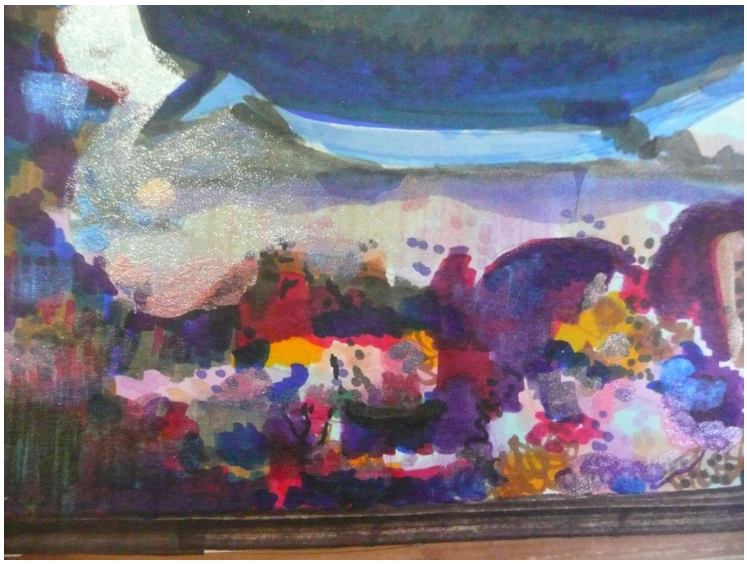

Figure 44. *Aquatic diorama study*, (2012-13), Ink, graphite, pigment on paper, in visual diary, detail.

Conclusion

At the conclusion of the first eighteen months of my project, my historical research on the relationship between painting and photography and on artists such as Vuillard had helped define the scope of my project. I had established that I was going to work with vernacular photography and that I would use a painterly approach. These decisions were tested and amplified by my approaches to experimental making in the studio, producing multiple versions of images and editing them using over-painting and collage. During the second year of my research, I intended to continue exploring paint application techniques and develop these editing processes. I anticipated that I would consolidate these ideas with research into contemporary artists whose painting practice was also engaged with vernacular photography.

CHAPTER TWO: DISCOVERY

2014-2015

Introduction

In this chapter I discuss the development of my work over 2014 and early 2015. During this time my methodology changed from making small paintings based on found images from the Internet, to developing a daily drawing practice and experimenting with monotypes based on my own photographs. This change occurred as a direct response to my experience at the Hill End Artist in Residence program. I will describe how this residency influenced my studio approach and chart my reasoning behind these changes.

I will outline my experimentation with oil and water-based monotype processes, and my rationale for adopting the water-based method as a preferred technique. I reflect on the work of contemporary artists Mamma Andersson and Peter Doig as the impetus for this change in approach. In an art historical context, I consider the monotypes of Edgar Degas and Paul Gauguin as additional influences on my own studio research. Additionally, I will examine the significance of pattern and texture within my monotypes. I will discuss this in direct relationship to the work of Mamma Andersson, David Brown Milne and Édouard Vuillard as a way to renegotiate spatial relations between figure and ground.

Hill End

Up to early 2014, my research had primarily consisted of experiments and studies. In May 2014, I was offered a residency at Murray's Cottage in Hill End, NSW. My intention for the residency was to apply the knowledge I had gained from initial studio research to produce more resolved works. I began by incorporating resin and interference colours into my oil paintings. I had originally thought to use these materials to pursue ways I might reference the shifting surface of the computer screen from which I was gleaning most of my source material. I also wanted to investigate how these materials could affect a viewer's perception of space. However, despite all the shimmer and gloss this produced, I found the results static and unsatisfying. I would start one painting then, disappointed in my efforts, put it aside after a couple of days. I would start another, only for it to be relegated to a rapidly growing collection of rejects. The weight of expectation I had for the residency seemed to be overwhelming. I felt the echoes of the artists that had gone before me. Under my feet lay an Ikat rug, faded from use and spotted with old paint, a gift to Donald Friend from Margaret Olley. Standing in their footsteps only reinforced my frustration.

In an attempt to break out of my slump, I went for a drive, a one-hour car trip from Hill End to Bathurst. Once there, I spent a few hours wandering around town. Autumn was deepening and as the day lengthened the light started to expand into a rich orange. I had been increasing aware of the quality of light in Hill End, which seemed to intensify as autumn advanced. The colours it threw were quite startling. I had observed it every afternoon at the cottage. It reminded me of evenings I had experienced in Northern Europe where the light approaching winter became a rich alizarin. With the afternoon fading, I started the drive back to the village. The road began to wind through a landscape of low, rolling green hills. At the top of a rise, my foot lifted off the accelerator. My eyes widened, and I pulled over. I turned off the engine and slowly stepped out of the car.

Somehow, I had driven out of the afternoon and into a painting. If I had a choice of paintings into which to magically teleport myself, this one would not have sprung to mind. It seemed I had stepped into Sydney Long's painting, *Flamingoes*, (minus the pink birds and naked nymphs) (Figure 1). Long, a figure predominately affiliated with Australian Impressionism could equally

be seen as an Australian Symbolist[115] transforming the landscape into a dream or visionary experience. Long's crimson light stained the pastoral scene before me blood red. While this painting is far from being a favourite, it is memorable. The red surface has arrested my gaze many times on trips to the Art Gallery of New South Wales, as the red light in it is strangely transfixing. Here, outside Hill End, the setting sun cast a dark, scarlet light over the landscape. The hills, grass and trees became uncanny in their cloak of translucent vermillion and my clothes and skin were glazed in rose.

Surprisingly, I didn't take out my phone for a photograph, perhaps because I knew that my basic point-and-shoot photographic skills could not capture the scene. No one would ever believe it anyway. It looked too unreal, too fabricated. Instead, I just stood on the ridge, with the minutes seeming to stretch out for hours. Somehow, in this red-rimmed world, my perception of time and space ceased to obey the normal rules. I watched until the light faded to pink and then evaporated from sight. The vision ceased. The whirring chirrups of tiny critters brought me back to myself as evening was creeping across the fields. As I walked back to the car I thought about why the scene was so striking. One thought I had was that the everyday could be made unreal or curious by the slightest change to our regular perception. I determined that I would start afresh in the studio the next day, with that thought in mind.

Figure 1. Sydney Long, *Flamingoes*, (1902).

115 Matthew Collings, "The Wizards of Oz," *Evening Standard*, Dec 6, 2016.

New approaches

To start anew I had to identify the source of the frustrations I was experiencing. I was dissatisfied with my recent works for several reasons. First, I was not as engaged with my subject matter; I felt disconnected from the imagery I was mining from the Internet. Searching online was especially time consuming because I was looking for very specific images, and consequently I spent less time painting. I was over reliant on finding an image where the narrative scenario created the visual interest, or some photographic quality or glitch created unique visual relationships.

Rather than selecting images that already had a readymade 'hook' in the subject matter, I realised I should instead now think about how to generate that hook through manipulating the visual qualities of the image through my studio process. The previous day's experience of the landscape being remade into an otherworldly setting underscored this. The unusual light cast across the countryside had transformed my regular visual understanding of a landscape. The experience had simultaneously altered my perception of time as I had attempted to comprehend an ordinary environment made unfamiliar.

Second, I reassessed my materials and my approach. Initially at Hill End, I had aimed to develop a layering technique I had been trialling, involving interleaving thick paint with layers of clear resin. The layers remained separate and I was hoping to build an image that had several spatial layers. But as the days in the Hill End studio progressed, the slowness of the process was mind numbing. Materials like resin were increasing the already long drying times for my oil paintings. My intention for this residency had been to explore different ways I could process imagery through series and variations. However, this time-consuming process hindered me from making several versions of an image easily. It was paramount that I found a rapid and more effective way to achieve this.

Consequently, I looked at the drawings, painted sketches, monotypes and mixed media works of Andersson and Doig. In these works I recognised a kind of mental and visual shorthand. Both artists often executed several versions of particular images and motifs. These works generated a constant shifting between abstraction and figuration, which often caused an oscillating relationship between figure and ground.

Figure 2. Mamma Andersson, *Ebb and Flow*, (2007).

Figure 3. Peter Doig, *Echo Lake*, (2000).

Figure 4. Mamma Andersson, *Snug*, (2008).

In works such as Andersson's *Ebb and Flow* (Figure 2), or Doig's *Echo Lake* (Figure 3), shapes and objects were often simplified. The use of transparent watercolour in *Ebb and Flow* heightens a sense of visual uncertainty. The transparency allows the viewer to see through the bed to the wall, or through the drawer to the floor. In *Echo Lake,* Doig uses a limited palette to equally describe background and subject. The brushy textures and marks of paint create a sense that space, air, light, objects and figures are all made of the same matter, constantly reforming. From these observations, I determined that the immediacy of drawing and sketching in paint held distinct possibilities, allowing me to rapidly process spatial relationships in a variety of ways.

I anticipated that drawing would allow me to experiment with my source material quickly, processing relationships between marks, texture, space and between figure and ground. It would also quicken the process of making a number of variations of a single image. Making versions of an image in quick succession would in turn help generate new approaches to my source material. My experience of the alizarin sunset had demonstrated that the world around me could be fundamentally transformed by the action of colour and light. On this basis, I abandoned searching for images on the Internet as starting points for work. As I wanted to produce new visual relationships within images, potentially any image or scene would suffice. I therefore began with what was immediately around me. I resolved to start a daily routine of drawing and sketching in paint, and photographing the surroundings of Hill End.

In my initial drawings, I used pencil and coloured ink markers with a variety of nibs, to achieve different marks. With this approach I could make several drawings in a short time. With each new version I could vary colour, composition, tone, scale, and line, thus editing and trouble-shooting various aspects of the image before I settled into a final version. I drew the garden at Murray's Cottage and went on daily walks to sketch the village. On these excursions I also took my camera, and photographed the village as a way to augment my drawings, attempting to capture the autumn light and colours at different times of day. The decision to start exploring monotypes was in part a response to Andersson's monoprint based paintings, such as *Snug* (Figure 4), as well as being as an extension of my daily sketching routine.

The Monotype

Although monotypes are often associated with printmaking as they share certain techniques and equipment,[116] there are a multitude of monotype processes that relate directly to the techniques and materials of painting.[117] In many monotype processes, images are painted onto a plate (rather than onto a canvas or support), and this image is then transferred to another surface like paper via pressure. Monotypes are therefore often described as a hybrid technique[118] somewhere between drawing, printing and painting, attracting terminology such as "painterly print[s],"[119] "printed painting,"[120] "printed drawings"[121] or "squashed… painting[s].[122]

The terms monotype and monoprint are often used interchangeably,[123] however there are important distinctions. The term monoprint refers to a single print made from a plate or 'matrix', which has some kind of permanent incision or addition on it,[124] such as an engraved or carved image. This means that some, or all, of the image on the plate is fixed and can be repeated.[125]

The monotype can be distinguished from all other printmaking forms by the four steps of its methodology succinctly described by Henry Rasmusen. In the process of the monotype (1) the painting component is completed first, (2) on a plain unincised plate surface which is, (3) transferred to another surface and (4) produces a single image.[126] Therefore the monotype is delineated as a completely unique painted or inked imprint from an unincised matrix or plate,[127] producing a single unrepeatable impression.[128]

116 Kurt Wisneski, *Monotype/Monoprint: History and Techniques* (Ithaca NY: Bullbrier Press, 1995), 13.

117 Wisneski describes various forms of monotype processes that use painting based techniques. These include additive, direct, light ground/light field, additive watercolour, subtractive, and dark ground/dark field monotypes, in ibid., 95-106.

118 Ross, *The Complete Printmaker*, 245.

119 Hayter, *The Monotype*, 11.

120 Samuel van Hoogstraten quoted in Ross, *The Complete Printmaker*, 246.

121 Paul Gauguin quoted in Barbara Stern Shapiro, "Nineteenth-Century Masters of the Painterly Print," in *The Painterly Print*, 34.

122 Joseph Pennel in Hayter, *The Monotype*, 16.

123 Hughes, *The Printmaking Bible*, 368.

124 Hayter, *The Monotype*, 18.

125 Ibid.

126 Henry Rasmusen, *Printing with Monotype*. (Philadelphia: Chilton, 1960), 4, https://babel-hathitrust-org.virtual.anu.edu.au/cgi/pt?id=mdp.39015006304912;view=1up;seq=18 (accessed 15 January 2018).

127 Middlemost, "Australian Monotypes," 24.

128 Hayter, *The Monotype*, 17.

This distinction between monotypes and monoprints can be further illustrated by considering the unique monoprints of Cressida Campbell. Campbell makes monoprints from carved woodblocks, which are hand painted in watercolour.[129] This technique could allow Campbell to make unlimited versions of the same image by repainting the block after each print. However, Campbell only ever makes one print from the corresponding woodblock[130] to sell in the art market, a unique single print, similar to the notion of the monotype.

While Campbell does not make multiple copies, the potential to use the block to rehearse and perfect that final, single print is inherent in the fixed nature of the carved imagery. Artist's proofs can be made; fine-tuning colour relationships, the carved image itself or the quality of the print made. Campbell admits that she does sometimes have to start all over again,[131] but this potentially could involve just the painting stage, and not discarding the block itself.

In comparison, the process of the monotype is not so flexible, nor so forgiving. Monotypes do not allow for any artist's proofs to be made throughout the process. If a print does not work, the entire image is lost. With the monotype, the artist has only one opportunity to transfer the image.

The earliest monotypes are attributed to Giovanni Benedetto Castiglione in the 17th century.[132] In the two centuries that separate Castiglione and Degas, William Blake is the only major artist known to have experimented with the medium.[133] In the 19th century Edgar Degas began experimenting with the monotype, inspired by colleague Viscomte Ludovic Napoléon Lepic.[134] Lepic and other artist printmakers wanted to revitalize printmaking through the individual inking of plates,[135] a response to the mass mechanical reproduction of images by photography and to mechanised printing in the 19th century. While Degas' monochrome figurative monotypes remain some of the most well known examples of the technique (Figure 5), he also produced more abstract coloured landscape monotypes (Figures 6). It is significant for my own research that Degas' exploration of the monotype can be directly related to his attraction to photography.

129 John MacDonald, "The Woodblock Painting of Cressida Campbell," http://www.cressidacampbell.com/intro/ (accessed 15 December 2017).

130 Ibid.

131 Ibid.

132 Sue Welsh Reed, "Monotypes in Seventeenth and Eighteenth Centuries" in *The Painterly Print*, 4.

133 Ibid., 5.

134 Antonia Lant, "Purpose and Practice in French Avant-Garde Print-Making of the 1880s," *Oxford Art Journal* 6, no. 1 Prints (1983): 23.

135 Eugenia Parry Janis, "Setting the Tone — The Revival of Etching, The Importance of Ink," in *The Painterly Print*, 18-22.

Figure 5. Hilaire Germain Edgar Degas, *The Fireside*, (1876-77).

Figure 6. Hilaire Germain Edgar Degas, *Paysage de Bourgogne*, (1890).

Degas: Photography and the Monotype

Carol Armstrong asserts that: "From the beginning, Degas's experiments with monotype printing had been tied back to the materials and practices of photography…"[136] These shared material and technical approaches include: images built through dark and light tonal relationships; the ability to produce accidental visual qualities through happenstance; transparency of materials; the ability to capture an instant in time; and common notions of the indexical.

Degas' exploration of the monotype occupies two distinct time periods in this oeuvre, from the mid 1870s to the mid 1880s when he executed the majority of his black and white figurative monotypes;[137] and a shorter period of activity in the early 1890s, when he made his colour landscape monotypes.[138] Degas' interest in taking his own photographs occurs slightly later however, with an intense period of experimentation around 1894-95.[139]

While his own forays into photography do not directly coincide with his use of the monotype, Degas was nevertheless intrigued with photography early in his career, collecting *cartes de visite*,[140] having his own photographic portraits taken,[141] and using photographs as the basis for paintings.[142] As early as the 1860s, works like *Princess de Metternich*[143] (Figure 7), show direct references to photography (Figure 8); while in the 1880s, Muybridge's stop-action collotypes were highly influential on Degas' paintings and sculptures of horses in motion[144] (Figures 9, 10).

With the invention of the Kodak portable camera in 1888,[145] the amateur photographer could dispense with technical darkroom practices and simply send the films away for processing.[146] Despite this revolutionary technology, when Degas took up photography himself, he preferred

136 Armstrong, "Degas in the Dark" in *Edgar Degas: A Strange New Beauty*, 41.

137 Hauptman, "Introduction," in ibid., 14.

138 Ibid.

139 Given Degas' prolonged interest in photography, it is perhaps unusual he did not take up the medium earlier in his career. Improved technology in the late 19th century decreased the costs and may have prompted Degas to finally embrace photography for himself. See Elizabeth C. Childs, "Habits of the Eye: Degas, Photography and Modes of Vision," in *The Artist and the Camera*, 77.

140 Ibid., 74.

141 Ibid.

142 Ibid., 73-88, and Scharf, *Art and Photography*, 185-195.

143 Childs, "Habits of the Eye," in *The Artist and The Camera*, 74.

144 Coke, *The Painter and the Photograph*, 159-161 and Childs "Habits of the Eye," in *The Artist and The Camera*, 75.

145 Gustavson, "Innovative Devices," in *Snapshot*, 15.

146 Ibid., 16.

Figure 7. Hilaire Germain Edgar Degas, *Princess de Metternich*, (c.1865).

Figure 8. André Adolphe-Eugène Disdéri, *Prince and Princess de Metternich*, (c.1860).

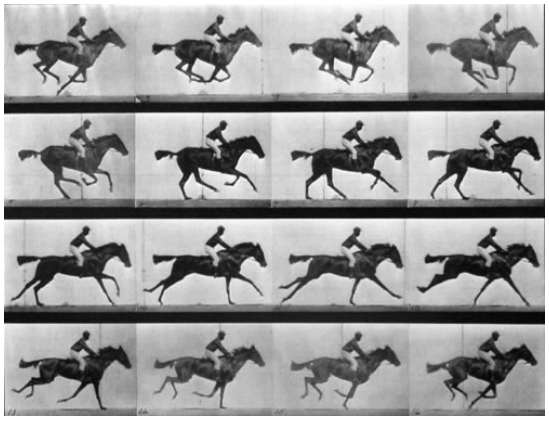

Figure 9. Eadweard Muybridge, *Animal Locomotion, Horse and Rider at Full Speed*, (1887).

Figure 10. Hilaire Germain Edgar Degas, *Horse Galloping on the Right Foot*, (late 1880s)

to use older technical equipment that relied on the darkroom.[147] Armstrong argues that Degas' dark-ground monotypes[148] use a system directly related to the positive and negative scheme of imaging evident in the photographic negative.[149] The "… photographic imbrication of light and dark and the mutual inextricability of figure and ground in photographs…"[150] for Armstrong highlight a direct continuity with the tonal processes of Degas' monotypes.[151] Armstrong also proposes that both kinds of images have a common approach, where the image emerges from darkness, either from the dark-ground or the darkroom.[152] These darkened fields relate to the chosen sites of Degas' subject matter, primarily the darkened chambers of the theatre, the ballet, the boudoir and the brothel.[153]

In material terms, Degas used four different types of plates to produce his monotypes, including copper, zinc, daguerreotype and celluloid plates.[154] During the 1870s-1880s, celluloid plates or celluloid coated plates were an alternative to glass plate negatives and eventually the material was adapted to produce camera roll film.[155] These celluloid plates, borrowed from photographic processes, were transparent and could have allowed Degas to trace images[156] while also allowing the reversed image to be viewed on the underside of the plate before it was printed.[157] It is well documented that tracing was a technique that Degas employed regularly to resolve his paintings.[158] Even though the finished output from these celluloid plates is limited,[159] the transparency of the plates may have played an integral part in Degas' experimental working processes.

147 Armstrong, "Degas in the Dark," in *Edgar Degas: A Strange New Beauty*, 42 and Childs, "Habits of the Eye," in *The Artist and the Camera*, 77.

148 Degas used two approaches for his tonal monotypes, subtractive or dark-ground process and additive or light-ground process. Light-ground monotypes are made by painting ink onto the plate, while the dark-ground monotypes are made by covering a plate with oil-based ink and wiping light areas of the image back into the dark ground, see Eugenia Parry Janis and the Fogg Art Museum, *Degas Monotypes: Essay, Catalogue and Checklist* (New York: Garland Publishers, 1977), xvii.

149 Armstrong, "Degas in the Dark," in *Edgar Degas: A Strange New Beauty*, 43.

150 Ibid.

151 Ibid.

152 Ibid., 42.

153 Ibid., 41-42.

154 Karl Buchberg and Laura Neufeld, "Indelible Ink: Degas's Methods and Materials" in *Edgar Degas: A Strange New Beauty*, 47.

155 Hannavy, *Encyclopedia of Nineteenth-Century Photography*, s.v. "roll film," 1207.

156 Buchberg, "Indelible Ink," in *Edgar Degas: A Strange New Beauty*, 48.

157 Theodore Reff, "The Technical Aspects of Degas's Art." *Metropolitan Museum Journal* 4, (1971): 155. http://www.jstor.org/stable/1512619 (accessed 15 January 2018).

158 Ibid., 149.

159 Buchberg, "Indelible Ink," in *Edgar Degas: A Strange New Beauty*, 48.

The monotype and photography both record chance and happenstance. Degas' monotypes were executed using oily ink that required the images to be completed quickly and spontaneously before the oil dried onto the plate.[160] Using a variety of implements like rags, brushes, matchsticks and his own fingertips to manipulate the stiff ink on the surface,[161] Degas produced monotypes that often contained mobile gestures, smears, blurs and accidental marks. Additionally, the process of transferring the monotype image from the plate to the paper is also unpredictable, incorporating another element of chance.[162] Degas' earliest experiments with photographs also show an engagement with the incidental in photography. From the blurred face of the Princess of Metternich, to his own photographic output, Degas embraced photographic happenstance; experimenting with cropping, fragmentation, blurring, and haloing, which seem to echo the visual qualities and effects of his monotypes.

Finally, the monotype and photography navigate ways to capture the instant,[163] and share the notion of the indexical. The photograph captures the tiny moment of time when the camera shutter is clicked. That single photographic moment is an indexical sign of the object or subject it represents. The monotype however, can be seen as an indexical trace of the final stages of the artist's physical gestures. As Jodi Hauptman argues, the monotype is, "… an index of that final instant, the resulting impression is a kind of arrest, a way of freezing the gestures of making in time."[164] I recognised that these shared aspects of the monotype and photography might hold implications for my own experiments and determined to trial some of these visual and technical approaches in the studio.

160 Hauptman, "Introduction," in ibid., 15.

161 Eugenia Parry Janis, "The Role of the Monotype in the Working Method of Degas – I," *The Burlington Magazine* 109, no. 76 (January 1967): 25-26. http://www.jstor.org.virtual.anu.edu.au/stable/875081 (accessed 13 September 2015).

162 Buchberg, "Indelible Ink," in *Edgar Degas: A Strange New Beauty*, 49.

163 Hauptman, "Introduction," in ibid., 15.

164 Ibid.

Unanticipated outcomes

In the practical context of the Hill End studio, I could easily produce monotypes with the minimal equipment I had at hand: oil paint, paper and my glass paint palette which could double as the plate surface. I had a small, hard roller I could use like a baren to transfer the image to the paper. The process required a quick working time. The painted sketch needed to be finished and transferred to paper promptly before the paint started to dry. Therefore the process would allow me to make several variations of an image in rapid succession. Depending on the size of the image, these oil monotypes could be completed within a few hours. I simply painted the image directly onto the glass plate and then placed a piece of paper on top of the glass, transferring the image using pressure from the roller.

The monotype process was particularly satisfying as it offered the possibility for unanticipated outcomes. While certain factors could be controlled, a wide range of variables in each step of the process escalated the opportunity for the image to transfer in different ways, creating unique translations of the image. These variables included changes to the paint, paper, pressure and time. If I used a heavy paint application splotching would form (Figure 11). Using mediums mixed into the paint could cause bleed marks or blurring (Figure 12). Leaving the paint to dry on the glass plate too long meant the image would be lighter and sometimes patchy (Figure 13). If I used a smooth paper the image would be more even, a rougher paper would create an overall texture, due to the reduced contact of the paper to the plate. Wetting the paper allowed for a larger amount of paint to transfer onto the paper, sometimes causing blurring and smudges. Lastly, I identified that the pressure I exerted to transfer the image could change the density or the evenness of the image. I could paint a scene over and over and the resulting monotypes were vastly different, by changing only one variable (Figures 14, 15).

These variables made me realise the potential that monotypes held as a new field of enquiry. The process of transferring the image from plate to paper contained the potential for chance, through differences in pressure and paint consistency. Soaking the paper with water also resulted in distinctly different results within each image, due to some areas of the paper being damper than others. The unique marks and textures created in the images were somewhat illusionistic, as the surface of the monotype was completely flat. They were more like painterly effects: washes, blurs, smudges, stains, bubbles, cracks and brush marks, which

Figure 11. *Hill End Caravan Park, study no. 1,* (2014).

Figure 12. *Landscape study no.1,* (2014).

Figure 13. *Hill End campsite, study no. 1,* (2014).

Figure 14. *Landscape study no. 2,* (2014).

Figure 15. *Landscape study no. 3,* (2014).

often interrupted the traditional hierarchy of illusionistic space. The image produced from the transfer process did not replicate the painting on the plate in a precise way. For example, in the printing process marks might be transferred unevenly, or only certain colours would be transferred, or perhaps certain colours might transfer as a lighter tone (Figure 16).

The qualities of these works reminded me of the landscape monotypes of Degas. In Degas' works, as well as my own experiments, the image contained areas that were transformed by passages of texture, mark or flat colour. These qualities interrupted the illusion of perspectival space and produced more atmospheric, abstract and planar pictorial relationships (Figure 17).

In this process all of my habitual methods of painting were transformed in unanticipated ways. For example in *Hill End street study* (Figure 18), there was a simultaneous reversal of the marks I made by the transferal of the image from plate to paper, as well as a systematic excavation through the layers of paint. Where the paper touched the painted image, the paint from the top layer of the plate lifted off first and became the base layer on the paper. Concurrently, the bottom layer of paint on the plate became the top layer of paint on the paper. On many occasions, this transferal through layers of paint was a partial one, causing a hybrid collection of marks or textures that made the transferred image unfamiliar and distinct from the one I had originally painted. The inventive possibilities of this working method were fascinating. It slowly revealed new ways to think about texture, space, planarity and mark making. By the completion of my residency at Hill End I was hooked on the monotype.

After Hill End, I decided to use a press to achieve improved contact with the paper, hoping to get more pigment lifting from the plate. Using the press facilities in the ANU Printmedia and Drawing Workshop, I created a series of small oil monotypes. In these, there was definitely an increased amount of pigment transferring to the paper (Figures 19, 20). The images were more vibrant and/or more substantial; new textures were produced, a soft blurring of the image and/or feathered brush marks (Figure 21). Unfortunately, however, the press seemed to almost eliminate the potential for any other textures. The prints I had made in Hill End had a variety of different qualities, including drier marks and rougher textures from partially transferred areas. These textures and clusters of marks seemed to break the image up into visually intriguing, spatially ambiguous areas, fluctuating between passages of mark and texture, to zones of flatness and illusionistic space.

Figure 16. *Murray's Cottage garden study no. 1*, (2014).

Figure 17. *Street corner, Hill End*, (2014).

Figure 18. *Hill End street study*, (2014).

Figure 19. *Hill End caravan park study no. 3*, (2014).

Figure 20. *Hill End caravan park study no. 2*, (2014).

Figure 21. *Hill End caravan park study no. 4*, (2014).

Texture, pattern and non-hierarchical space

I recognised that the textures in my Hill End monotypes operated in a similar way to the textures in the work of Andersson, David Brown Milne and Vuillard. In the work of these artists, texture or pattern had the effect of flattening pictorial space and confusing figure and ground relationships. This is due to the way texture and pattern are read visually; as an even distribution of marks of an equal material weight located across the picture plane.

Mamma Andersson

Like many contemporary painters, Andersson's work can be viewed as transhistorical. Andersson's "paintings tinker with the after-image of the modern, apparently to mourn it, but prodding it still for signs of life."[165] In Andersson's work, texture and brushwork are critical tools through which she revisits Modernist and Symbolist approaches to spatial relationships for psychological affect. Through these textures and washes as well as more overt descriptions of figures or forms, Andersson offers the viewer a Neo-Symbolist language, where fantastical "undefined presences"[166] intrude into the everyday. In *Study Kit*, (Figure 22), washy transparent swathes of paint equally intersect figures, tables, walls and space. The translucent textures do not remain confined to the objects that they describe, but instead spill outside of their borders to also form tables, walls or other figures. These textures interconnect the figure and ground. They simultaneously describe separate objects, but also form broader spaces, creating an amalgam of interlocking visual information.

In *Digs*, (Figure 23), texture seems to play with the viewer's perception of states of matter. The floor, normally understood as a solid surface, is constructed with watery textures of pooled paint. This transforms the hard floor into a flooded arena, where objects seem to float on its waterlogged surface like the scattered detritus from a receding wave. In comparison, the works of Canadian artist David Brown Milne appear parched and desiccated.

165 J. J. Charlesworth, "Mamma Andersson, Stephan Friedman Gallery: Northern Exposure," *Art Review*, London, Dec 2002/ Jan 2003, 121.

166 Ferguson, *Undiscovered Country*, 80.

Figure 22. Mamma Andersson, *Study Kit*, (2004).

Figure 23. Mamma Andersson, *Digs*, (2006).

David Brown Milne

During his assignment as a Canadian war artist, Milne favoured an unusual method of using watercolour, using a stiff brush and extremely dry or thick watercolour paint instead of more traditional transparent washes.[167] His compositions were constructed by a staccato of rough linear marks, as can be seen in *Wrecked Tanks near Sanctuary Wood* (Figure 24), and *Courcellette from the Cemetery* (Figure 25). Milne was assigned as a war artist after the armistice was called in 1918, arriving in England in 1919.[168] Consequently rather than depicting the action of war, Milne looked to describe the aftermath and decimated landscapes of France and Belgium.[169]

Employing the dry brush technique, Milne depicts the textures of the churned and blasted earth of the battlefields with short choppy brush strokes and small flecks of colour.[170] This approach creates a picture plane covered in a rough texture like a harsh visual static, which reinforces the psychological realities of these devastating scenes of war. This is accentuated not only by his dense accumulations of linear marks, but also by the areas of paper left unpainted. The uniform colour of the paper could equally be used to describe a distant horizon or a foreground detail. Thus, the tonal regularity of the paper disrupts the illusion of perspectival space, flattening out the picture plane.

In *Courcellette from the Cemetery,* the repetition of lines and the action of the unpainted ground plane, the paper, act to unify the figurative elements with the picture plane. The crosses of the graves, the earth, and the bouquets of flowers, all seem to occupy the same space and become fused together. Where does one cross end and another start? Interlocking the figurative elements to one another and to the ground plane renders this graveyard more expansive and the disasters of war all the more poignant.

Milne's system of description creates figure and ground relationships that become difficult to decipher. He employs a uniform treatment to both the figurative elements and the ground plane. His works are often executed with very little tonal modelling and use a limited palette of colours. This evokes a sense that everything in the picture is integrated or interrelated. Hence, in a landscape, such as *Woman in Blue, Sketching,* 1916 (Figure 26), the figure is rendered as a collection of generalised shapes and becomes almost embedded in the ground plane.

167 Rosemarie L. Tovell, "The Man Changes, and with That, the Painting: The War Watercolours," in *David Milne, Watercolours: Painting toward the Light*, ed. Katherine Lochnan (Ontario: Art Gallery of Ontario and Douglas and McIntyre, 2005), 65.

168 Sarah Milroy, "War and Peace: David Milne and the First World War," *Canadian Art*, (Summer 2014): 54.

169 David P. Silcox, *David Milne: An Introduction to his Life and Art*. (Ontario: Firefly Books, 2005), 25.

170 Milroy, "War and Peace," 54-56.

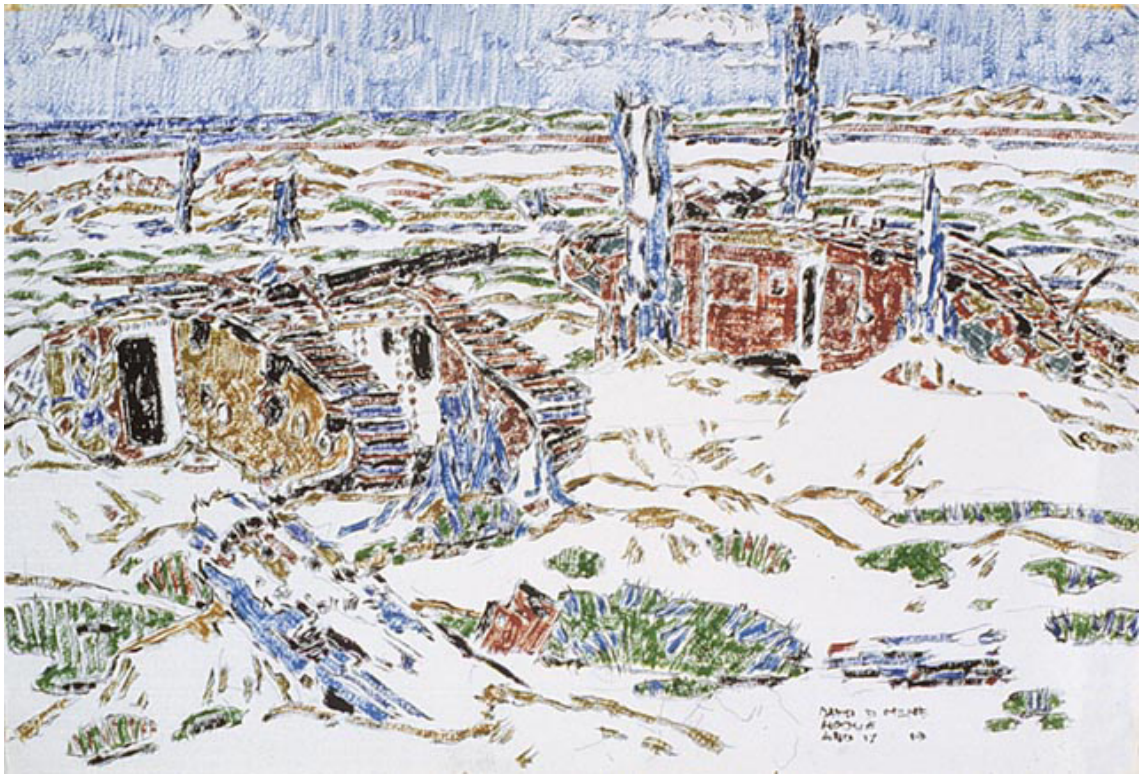

Figure 24. David Brown Milne, *Wrecked Tanks near Sanctuary Wood*, (1919).

Figure 25. David Brown Milne, *Courcellette from the Cemetery*, (1919).

Brown's images seem to employ a translation system similar to a code[171] or patterning system like camouflage.[172] This is due in part to the broad delivery of the image. These compositions are constructed using shapes of roughly the same size, and forms and colours are democratically distributed across the surface. This creates a more planar, flatter, image with the same depth of focus across the picture plane. It equalises the relationship between figure and ground as well as producing a dynamic opposition between material flatness and the allusion to three-dimensional space. The non-hierarchical approach to picture space in Brown's work operates in similar ways to the spatial ambiguities caused by pattern in the paintings of Vuillard.

Figure 26. David Brown Milne, *Woman in Blue, Sketching*, (1916).

171 The New York Times in 1912 compared Milne's approach to a type of "telegraphic notation," quoted in David P. Silcox, *Painting Place: The Life and Work of David B. Milne, vol. 1.* (Toronto: University of Toronto Press, 1996), 55.

172 Ibid., 82.

Édouard Vuillard

For Vuillard, pattern was not an arbitrary addition to his paintings. It came directly from the observation of his home, or the homes of his patrons. The interior and domestic sphere was both the stage and subject of his work.[173] The Vuillard family home served as the premises for his mother's corsetry business.[174] In the Vuillard home, fashionable patterned materials not only adorned people, but also decorated a variety of surfaces, walls, floors, tables and screens. Kimberley Jones argues that in *Interior (Marie leaning over her work)* (Figure 27), the combination of overall texture and pattern creates uncertain spatial relationships.[175] The colours on the figure of Marie, her brown hair, blue dress and grey apron, are repeated elsewhere within the composition, enmeshing the figure into the ground and causing the background to move forward.[176]

In paintings like *The Striped Blouse,* (Figure 28), or *The Flowered Dress,* (Figure 29), pattern on clothing is rendered with very little tonal modelling, flattening out the figure. The pattern almost ignores the form under it, as if the women's figures were not volumetric but rather flat silhouettes. In *Interior with Work Table* or *The Suitor,* (Figure 30), the patterning of the figures intersects with the decorative backgrounds, creating strange conglomerate forms. These kinds of explorations of pattern produce a sense of spatial uncertainty where flat planarity exists concurrently within illusionistic renderings of space. Gamboni suggests that these spatial compressions and Vuillard's "state of eye" [177] also contain a Symbolist reading, as a form of psychological tension that remains elusive and yet is implicit in his depictions of the pressures of bourgeois life.[178]

In the works of these three artists, there is a Symbolist or Neo-Symbolist visual language operating, a psychological tension created from compressions of space and/or overt brushwork. I recognised that this arose also from texture and pattern producing a sense of camouflage or visual noise. It concealed or confused the exact relationships between the edges of objects or spaces, and hence complicated the relationship between figure and ground. Formally, these qualities created an interruption to the picture space, asserting the planarity or flatness of the picture plane in contrast to areas maintaining illusionistic perspectival devices. But when I compared the results of my Hill End monotypes to those done with a press, I realised that using a press was not allowing as many textures to form. I now learnt of another monotype technique, one that used water-based media instead of oil paint.

173 Cogeval, *Edouard Vuillard*, 130.

174 Easton, *Intimate Interiors*, 26.

175 Cogeval, *Edouard Vuillard*, 139.

176 Ibid.

177 Dario Gamboni in Cogeval, *Edouard Vuillard*, 418.

178 Ibid., 418-9.

Figure 27. Édouard Vuillard, *Interior (Marie leaning over her work)*, (c.1892-95).

Figure 28. Édouard Vuillard, *The Striped Dress*, (1895).

Figure 29. Édouard Vuillard, *The Flowered Dress*, (1891).

Figure 30. Édouard Vuillard, *Interior with Work Table* or *The Suitor*, (1893).

Water-based monotypes

In this water-based process the potential to create a variety of marks and textures appeared to be far greater. A degreased plastic plate was coated with a diluted layer of Gum Arabic and/or detergent. This base was allowed to dry and then the image could be painted or drawn onto the surface with any water-based paint or ink. Once the paint was dry a sheet of dampened paper applied to the surface of the plate would reactivate the water-based paint. The image was then transferred to the paper by being passed under a press.

At first I was interested in this approach as I thought I could adapt it to the drawings I was continuing to make using ink markers. In initial experiments I tested these markers, but also trialled other materials, including watercolour, watercolour pencils and gouache. While these experiments were rudimentary, I could see how this method could offer new ways to create textures and painterly marks (Figure 31). The water-based paints had far more potential to create texture than the graphic qualities of the markers. Hence I abandoned the markers in preference for watercolour and gouache.

Figure 31. *Interior with mural no. 4*, (2014), detail. The left side of the image is drawn predominately with ink markers, while the right side is painted using gouache and watercolour.

Figure 32. Paul Gauguin, *Arearea no Varua Ino (Words of the Devil) [recto]*, (1894).

Paul Gauguin

Concurrent to these early experiments with the water-based technique, I searched for other examples of this process. Paul Gauguin had produced many gouache and watercolour monotypes such as *Arearea no Varua Ino (Words of the Devil)* (Figure 32), and *The Pony* (Figure 33). These examples of a similar technique reassured me that a density of colour could be transferred from the plate while still maintaining a variety of textures and marks, such as bubbling, brushstrokes, and washes as well as flat, denser passages of colour.

Figure 33. Paul Gauguin, *The Pony*, (c.1902).

Experimenting and recording

I began to experiment with this process in earnest, making both test prints as well as producing small studies. These test prints were invaluable, creating a resource of a wide variety of effective methods and effects. I established an archive of this information, which I have continued to develop over the course of my research (Figures 34, 35).

I recorded these variables methodically, documenting the ways each one affected the transference of the paint from the plate and the resulting image. These tests involved varying the strength and type of Gum Arabic used, the type of paper, paint brands, paint pigments and the amount of time the paint was left on the plate. For instance, many of the pre-made solutions of Gum Arabic available on the market are used for lithography and are quite dark in colour and have a tacky consistency. These solutions caused stains and discolouration in the transferred image, particularly where the paper showed through. I therefore sourced a very refined Gum Arabic kibble that was pale in colour and started making my own saturated solutions of Gum Arabic. When diluted, this kind of Gum Arabic was effectively transparent. It caused no staining and additionally was not as sticky, so when lifting the image from the plate the paper did not tear.

Additionally, I noted the textures that could be produced by different application methods: dampness of the paper, dampness of the plate, paper type and the pressure of the press. Through these experiments I began to identify and manipulate the factors that could produce a variety of textures and marks to build into small works (Figure 36).

Up until this time, I had only a limited experience working with watercolour and gouache. I soon recognised that the way the paint interacted with the plastic plate was totally different from working directly onto paper. Unlike paper, the plastic sheet was non-absorbent. Therefore a variety of factors could influence how the paint went onto the surface of the plate, creating a range of textures.

Figure 34. *Archive gouache monotype sample*, (2015). The text swatch shows how textures can vary with colour within a single brand of paint.

Figure 35. *Archive watercolour monotype sample*, (2015). This swatch shows how textures can vary with application. Within each colour sample, the dense colour at the bottom is over-painted several times. The top of each square has a more watery texture and is applied in a single layer.

Figure 36. *Archive monotype samples*, (2015). These samples show a variety of textures from different paint brands, paper types, application methods and colours.

These factors included paint consistency, paint thickness, paint dilution with water, paint brand, speed of delivery, whether the paint was gouache or watercolour or a mixture of both. For example, a faster application of paint to the plastic tended to break the surface tension of the water in the paint, and the paint would bubble or wrinkle. Likewise, thin paint produced a variety of watery marks that would pool (Figure 37). If paint was applied slowly to a small surface area, the surface tension did not break so quickly, and the paint could be delivered more densely or flatly (Figure 38). Thick paint and over-painting areas could allow for the texture of the brush mark to become more evident. Certain colours dried out very quickly and tended to crack, causing an irregular transfer to the paper. Particular brands, or even particular colours within brands, lifted off the plate in irregular ways, possibly due to the amount of binders or driers in the paint (Figure 39).

Originally, I had pursued monotypes in part for how quickly I could make the images. But now that I had gained some promising results and become more familiar with the nuances of the process, I wanted more time to paint on the plate surface to see how far I could extend my working knowledge of the materials and technique, while increasing the scale of the work and the detail contained within it.

Another advantage the watercolour monotype technique offered was that it allowed more time to work on the plate, as the dried watercolour paint could be reactivated with damp paper. Most references and examples of watercolour monotypes that I found still approached the technique with the same quickness of delivery as oil monotype approaches, without any extended time placed on the painting phase.

Following the direction outlined in Wisneski's technical manual[179] and early test prints, I determined that I could leave the paint on the plate for several days before printing. However, I decided to broaden these experiments to ascertain exactly how long the paint could be left on the plate before printing. Through these trials I established that I could leave the paint on the plate for several weeks, although after that period the resulting prints were often uneven, and in places some areas of paint started adhering or setting to the plastic and would not lift off. I concluded that I did not have an indefinite window, but rather a timeframe of several weeks in which to execute the painted image.

179 Wisneski, *Monotype/Monoprint*, 101.

Figure 37. *Where ever you go there you are*, (2014-15), detail.

Figure 38. *Mangrove room study*, (2014-15), detail.

Figure 39. *Vivarium (study)*, (2014-15).

This durational shift from a traditionally quick monotype methodology to one where an extended amount of time is spent on the painting phase was a significant advancement of my research. This method allowed me to create intensely detailed works, which, combined with the textures of the monotype process, formed images that had more complex spatial relationships and varied surface qualities. This amalgamation of a traditional approach to watercolour monotype with an extended painting phase, therefore helped me to formulate a unique, hybrid watercolour/monotype technique: a contemporary hybrid medium.

Paper as ground

Throughout these early tests I realised that I was not able to guarantee how each image would transfer to the paper, and often this meant that the paper would show through the image in many places. It became obvious that the paper itself was an integral component of the image that I needed to consider. Using white paper created a large tonal contrast between the paper and the painted image. I was again reminded of the work of Vuillard and Bonnard, where sections of their paintings were left free from paint to allow the ground to show through. The blaze of unpainted canvas that formed the light edge of the figure in Bonnard's *Woman in front of a Mirror* was an example I had appreciated regularly at the National Gallery of Australia (Figure 40). Numerous works of Vuillard like *Interior* (Figure 41) and *Woman Sweeping* (Figure 42) are painted onto cardboard, where the brown, tan or grey colour of the support stood in for a wide range of mid-tones. Similarly, the watercolour and gouache monotypes of Gauguin were printed onto a coloured paper. I reasoned that as coloured grounds in a painting allowed the image to become more integrated, I could achieve a similar result with the monotype by either painting the paper or using a coloured paper.

With some basic experimentation, I realised that painting a coloured ground onto the paper resulted in patchy transfer. Painting the paper tended to seal the paper or reduce its absorbency. I decided to simply use coloured papers, just as Vuillard and Gauguin had done. I tested a variety of different papers, finding differences in the transferring abilities of some, due to texture or the kind of dye or size in them, but on the whole the results were far more successful. The coloured papers offered both a good transference of paint from the plate and a more integrated final image (Figure 43).

Figure 40. Pierre Bonnard, *Woman in front of a Mirror*, (c.1908).

I also considered where I should place the image on the paper. Many printmaking conventions place the printed image centrally, on a large piece of paper. The paper is often much larger than the plate, which creates a frame of plain paper bordering the print. Along the bottom of the print, the title is placed in the centre; the left bottom corner has a description of the type of print and on the bottom right corner an edition number. However, I decided that I would make the paper smaller than the plate and have the image continue to the edge of the paper, as a bleed print. My decision was purely based on the importance of the edge of the image in relation to the paper, and came directly from my approach as a painter where I would always work the image to the edge of the support.

The idea of using borders, notations and signatures I considered as constricting of the images, or as demarcating them as an image from a specific methodology. Even though I was using a printmaking process, the amount of time I was beginning to invest in painting the images significantly influenced how I thought about them. I began to work back into some works, over-painting the image after it came through the press. I had begun to think of these works not simply as prints or painted images, but as hybrid images. By choosing not to adopt any identifiable markers indicative of a specific form of making, I sought to make the images more enigmatic, not easily defined by their construction methods or materials.

Figure 41. Édouard Vuillard, *Interior*, (1894).

Figure 42. Édouard Vuillard, *Woman Sweeping*, (1899-1900).

Figure 43. *Observation Deck*, (2015).

Limiting failure, calculating chance

While making these early monotypes, I acknowledged that although I might be able to control many aspects of the process, I could not control it entirely. More importantly, I recognised that I did not want complete control. The incidental and experimental nature of the process was an integral part of the excitement and evolution of this new work. The methodology contained an inherent potential to produce unexpected results. This inbuilt capacity for variation or mutation within the transfer process offered the probability of randomness, ambiguity and indeterminacy.

Although it was important to control some technical aspects, such as ensuring the paper did not tear or that the paint lifted off the plate, I embraced other more arbitrary aspects of the process, which were often related to the action of water. For example, I welcomed the various ways different consistencies of paint reacted to the plate, whether it tended to pool, run, crack or bubble, each consistency held the potential for different painterly effects. In the print process I used a water sprayer to lightly mist the surface of the plate to reactivate the paint prior to printing. This often resulted in some large droplets of water landing in some areas, or some sections to be slightly damper than others, meaning the image held the potential for blurring or smudging. These inbuilt limitations of the monotype process, which allowed the image to glitch or blur, provided a means by which the works could oscillate between figuration and abstraction; the material and the visual; the real and the virtual. I thought they resonated significantly with Andersson's Neo-Symbolist language of ghostly figures and unreal textures echoing the uncertainties of lived experience. The glitches and erosion of imagery within the monotype held a similar material and visual indeterminacy. The monotype represented contemporary doubt and uncertainty made analogue.

Conclusion

I concluded that the visual qualities of the monotype were very effective vehicles for exploring not only the relationship between photography and painted images, but also broader ideas relating to contemporary visual culture, contemporary experience, contemporary painting and visual perception.

Working from a two-dimensional source photograph and translating it into another two-dimensional medium, emphasised the characteristic flatness of the monotype. This 2D-to-2D translation is highly significant when considering similar approaches of Vuillard, Gauguin and Degas, who all worked from photographs to produce images in either print media or painting, which involve non-hierarchical approaches to relationships between composition and picture space.

The photograph also reduces and democratises visual information into a set of fixed relations. However, when this photographic organisation of objects and subjects in space is translated into a monotype, these relationships begin to collapse. In a photograph, motifs within a scene are generally read as distributed within and across the pictorial space, while in the monotype they become both physically and spatially compressed into the same plane. This does at times occur in photography producing an effect termed *false attachment*. When false attachments form through the compression of space,[180] objects in both foreground and background appear to occupy the same plane. The flatness of the material surface of the monotype forces figure and ground relationships to become embedded into each other, as if the entire surface was one complex scheme of false attachments.

During this phase of my research, the process of water-based monotypes allowed me to experiment with textures and painterly effects, and to create tension between figure and ground. The non-absorbent surface of the plastic plate facilitated the production of a wide variety of painterly textures that could not be produced by directly painting onto paper. Significantly, given the surface of the monotype is completely flat, these textures are somewhat illusionary. As painterly effects they contribute to the paradoxical qualities of the medium. Additionally, the unpredictability of the monotype process created information

180 Terence Wright, *The Photography Handbook* (New York: Routledge, 2013), 56.

drop out, textural noise and image erosion. These qualities interrupt the traditional hierarchy of perspectival space and produce an oscillation between planarity and illusion, complicating our visual perception of the image.

In the next chapter, I will discuss how the introduction of photocopying and photo-collage precipitated fundamental changes in my approach to my photographic source material. These processes delivered new ways to reconfigure pictorial space relating to human vision and memory and generated new relationships between the monotype and photography.

CHAPTER THREE: DEVELOPMENT

2015-2016

Introduction

This chapter describes the progress of my work from the middle of 2015 to early 2016. During this period I consolidated my studio approach using water-based monotypes and introduced photocopying and collage into my working process. In this chapter I will examine how photocopying offered new ways to interpret photographic information into small, prescribed units of data and visual textures. I will interrogate how magnification through photocopying produces effects in some ways visually similar to Gustav Klimt's landscape paintings and discuss the implications that magnification technologies may have for the depiction of pictorial space.

In this chapter I will also reflect on the introduction of collage into my working process. While I initially began collaging as a practical approach to reformatting my source photographs, with continued experimentation I realised collage offered new potential for my research. This included transforming the depiction of space and the notion of time within my images; providing an approach to negotiate between memory and the photographic document; and a method to explore the difference between photographic vision and a bodily understanding of the world. With reference to Mamma Andersson, I explore how collage using fragmentation and repetition may simulate the processes of memory. In relation to the work of David Hockney, I will discuss how collage may help to negotiate the differences between embodied visual experience and photographic vision.

Photocopies

In 2015, I began work on some larger monotypes creating photographic cartoons from photocopies. These cartoons facilitated the transcription of my imagery directly onto the acrylic plate. As I could partially see through the semi-opaque plate surface, I could position the cartoons underneath the plate as a guide, allowing me to translate the basic composition without the need of a grid (Figure 1).

As I was using an A4 printer/copier to enlarge the photographs, this often necessitated making copies of copies to create larger images. This re-copying began to create a kind of textural noise or image erosion, with poorer resolution causing sections of the photographs to break down into areas of pixilation, blurring and graininess (Figure 2). In other areas, colour became circumscribed and formed facetted shapes. I recognised that these textures could easily equate to units of mark that I could reproduce with a paintbrush, allowing me to establish a practical system of translating the image onto the plastic. These repeated brush marks and a system of interlocking tessellated shapes took on many visual similarities to the landscape paintings of Gustav Klimt.

Figure 1. Work in progress, *Understory no. 2*, (2016). Photograph shows the photographic cartoon positioned underneath the plastic plate.

Figure 2. Various examples of visual textures from photocopied photographs, (2015).

Gustav Klimt and non-hierarchical landscape

Klimt's landscapes are constructed using a compact system of mosaic-like facets, created from fairly uniform brushstrokes. For example, in *Garden Landscape* or *Blooming Meadow*, (Figure 3), except for a small sliver of sky, most of the painting is made up of repeated marks fairly similar in scale. This creates a uniform picture surface and a sense that each brushstroke is equivalent in terms of its material presence.

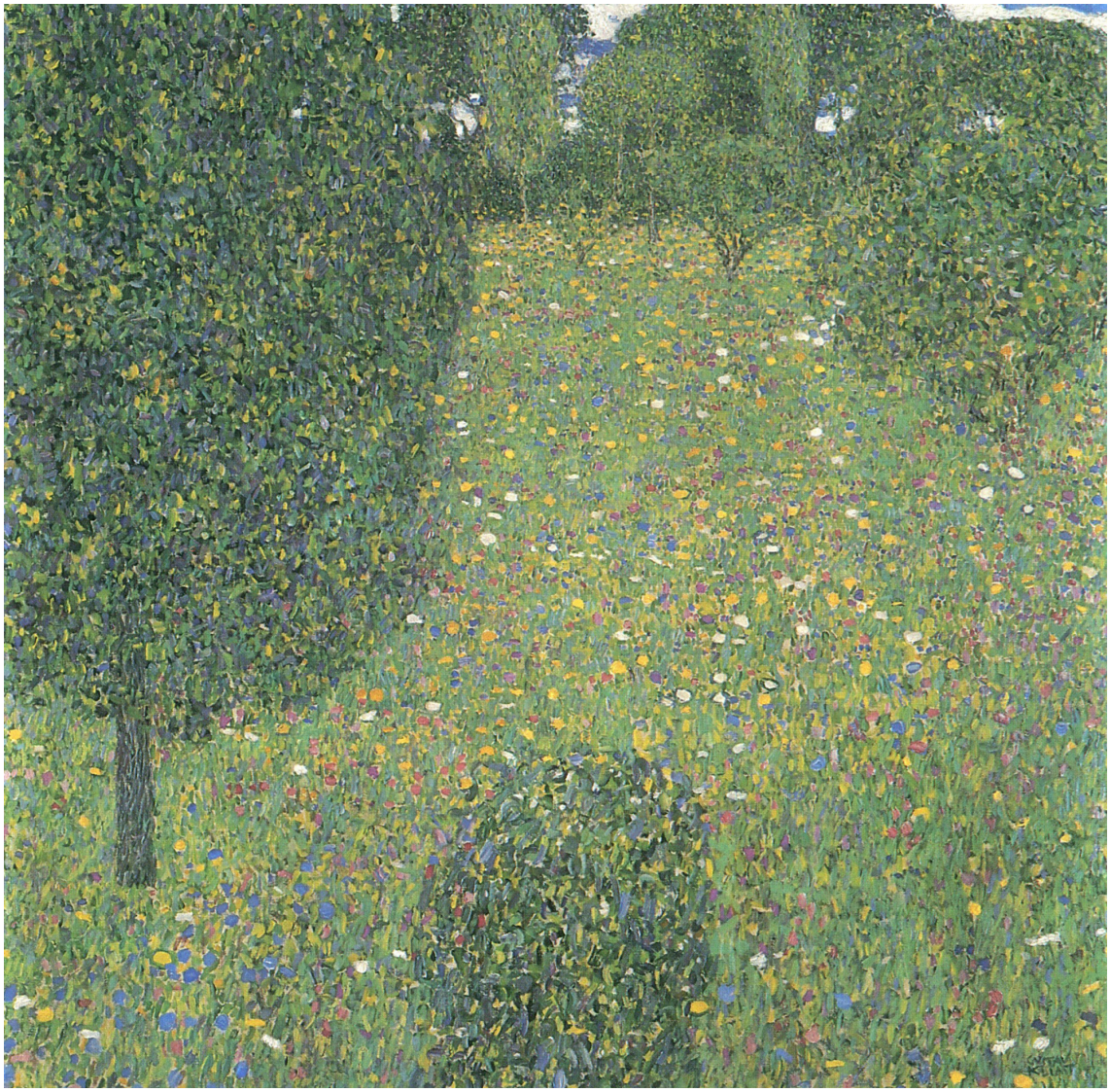

Figure 3. Gustav Klimt, *Garden Landscape* or *Blooming Meadow*, (c.1904-06).

I noted a similar equivalency of mark in my own monotypes. In *Understory no. 1* (Figure 4, 5), the physical weight of the press roller not only flattened the painted marks, it simultaneously equalised the material weight of each brushstroke.[181] This equality of mark had wider implications for the perception of space and figure-ground relationships.

Pictorial space within images is often defined by the relationship between figure and ground.[182] Therefore, applying brushstrokes of equal material weight can reinforce a non-hierarchical system of vision and complicate figure-ground relationships. In Klimt's landscapes, a tree, the sky, or a field of flowers are frequently rendered with equal emphasis and visually similar marks. This establishes a sense of figure and ground relationships being linked together regardless of recessional order in space. Equivalency of mark, use of limited tone and a system of repeated brushstrokes frequently accentuate a sense of planarity and are also evident in the work of artists I had previously researched, specifically David Brown Milne and Édouard Vuillard. In their works and Klimt's landscapes these pictorial aspects combine to create a perceptual flickering between perspectival illusion and planarity and between figure and ground (Figures 6, 7). This spatial oscillation can be further analysed by considering a work such as Klimt's *Poppy Field*.

Poppy Field, 1907 (Figure 8), depicts a green meadow, receding to a high horizon, scattered with red poppies. The lower three-quarters of the picture plane is taken up by the field, with two trees framing it. The field is rendered with repeated daubed paint marks, in a limited range coloured tones. These tones are very similar across the painting regardless of the depth of their location in the picture space. When considering the trees on either edge of the field, not only does the colour and tone of the trees match and blend into the fore, mid and background field, but the paint application of the trees is mimicked in the daubed marks of the meadow. This causes the edges of the trees to be become effectively disguised and compressed into the ground plane. The similar surface textures, analogous tonal range and the use of repeated marks operate like disruptive patterning and colour matching in camouflage,[183] making it difficult to discern the trees from the field or vice versa. These features reassert a flattening of pictorial space and inhibit depth cues, causing a perceptual ambiguity that becomes more pronounced with sustained looking and with an increased viewing distance.

181 Julie Brooke, "One Way or Another," Exhibition room sheet, Foyer Gallery, School of Art & Design, Australian National University, February 2017.

182 Laura Dolp, "Viennese Moderne and Its Spatial Planes, Sounded," *Nineteenth Century Music* 33, no. 3 (2010): 267, https://search-proquest-com.virtual.anu.edu.au/docview/504046443?accountid=8330

183 Martin Stevens and Sami Merilaita, "Defining Disruptive Coloration and Distinguishing its Functions," *Philosophical Transactions: Biological Sciences* 364, no. 1516 (2009): 481-2, http://www.jstor.org.virtual.anu.edu.au/stable/40485812

Figure 4. *Understory no. 1*, (2015), detail.

Figure 5. *Understory no. 1*, (2015).

Figure 6. David Brown Milne, *Limestone Rocks*, (1916).

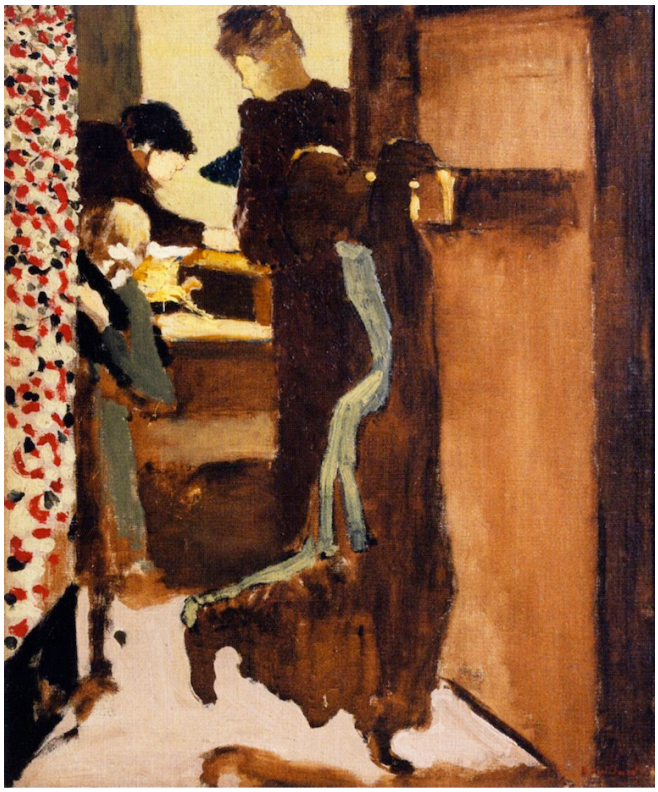

Figure 7. Édouard Vuillard, *The Drawer*, (1892).

Klimt's facetted approach to mark making was influenced by Post-Impressionism and Pointillism[184] and the ways they recast pictorial space. At first glance *Poppy Field* might appear to represent a field of poppies extending into the distance, but as the gaze lingers among the quasi-Pointillist marks, this illusion converts to a flattened plane of brushstrokes, pressed up to the foreground of the picture space. With continued looking, the illusion of a receding landscape may start to reassert itself once more, only to then dissolve into flatness again. This shifting sense of figure and ground can also be affected by viewing distance. Close up, the bright brush marks can be read separately, yet with increased distance from the picture surface, the daubs of colour may merge together mixing optically to produce some perspectival recession.

In the example of *Poppy Field,* I would argue that the materially overt brushstrokes promote a sense of a fluctuating perception of space. Here the viewer's attention oscillates between an illusion of recessional space and the material marks on the picture plane. This constant visual reminder of the physicality of the painted surface interrupts the viewer's seamless reading of recessional space and reinforces a sense of a flat picture plane.

Another possible explanation for this sense of spatial indeterminacy may be due to the way the human eye searches for depth clues to distinguish moving objects from surrounding space, a survival instinct to enable the detection of danger and potential prey.[185] Therefore a combination of optical phenomena and biological function result in the visual experience of an active and moving picture space; the figure-ground relationships crystallising, evaporating and reforming in an endless state of perceptual elasticity.

184 Stephan Koja, "Absolutely Engulfed in the Beauty of Illusion," in *Gustav Klimt, Landscapes*, ed. Stephan Koja (Munich: Prestel Verlag, 2012), 38.

185 Ings, *The Eye*, 42-3.

Figure 8. Left, Gustav Klimt, *Poppy Field*, (1907). Right, Gustav Klimt, *Poppy Field*, (1907), in grey scale to show tonal relationships.

Figure 9. Emma Bacher (née Paulick). *Gustav Klimt with a telescope on the jetty at Villa Paulick in Seewalchen/Attersee*, (1904). Photo: akg-images/Imagno.

Telescopic vision

I speculated whether Klimt, who was a keen amateur photographer,[186] may have observed a breakdown in visual information through his use of a camera. Although evidence suggests that Klimt referred to photographs for some of his landscape paintings,[187] it is more significant that Klimt regularly used a pair of opera glasses and a telescope, both magnifying devices, to paint his landscapes.[188] Klimt executed his landscapes almost exclusively during annual summer vacations to the Salzkammergut resort areas in Austria. He would spend weeks roaming the countryside, painting en plein air, with the aid of a telescope or pair of opera glasses, which were effectively a small set of Galilean telescopes.[189] This is evidenced in Klimt's own correspondence[190] and an interview with his niece discussing his working methods[191] (Figure 9).

Recently, Anselm Wagner and Alfred Weidinger have reconstructed the viewpoints of some of Klimt's Attersee paintings. By observing changes to the compositional angles of the paintings with increased distance, they have identified the approximate locations from which these works were painted, demonstrating they can only have been made with the aid of magnifying technologies.[192] Without optical magnifiers, Klimt would have needed to set his easel up in the middle of the lake, and it now seems highly unlikely that he painted from a boat as other writers have presumed.[193]

186 Anselm Wagner, "Klimt's Landscapes and the Telescope," in *Gustav Klimt, Landscapes*, 166.

187 Alfred Weidinger, "Gustav Klimt and Photographs," in *Gustav Klimt & Emilie Flöge: Photographs*, eds Agnes Husslein-Arco and Alfred Weidinger (Munich: Prestel Verlag, 2012), 15-16.

188 Wagner, "Klimt's Landscapes," in *Gustav Klimt, Landscapes*, 165-66.

189 John E. Greivenkamp and David L. Steed, "The History of Telescopes and Binoculars: An Engineering Perspective," *Proc. of SPIE*. 8129, (September 08, 2011): 812902-10. doi: 10.1117/12.904614

190 Christian Nebehay cited by Wagner, "Klimt's Landscapes," in *Gustav Klimt, Landscapes*, 163.

191 Wagner, "Klimt's Landscapes," in ibid., 163.

192 Ibid., 165-66.

193 Ibid., 165.

The lens and visual perception

Klimt's use of the telescope has been interpreted as reflecting his Nietzschean existential aesthetics.[194] In relation to my research however, I will concentrate on Klimt's use of the telescope as a significant aid to visual perception. The value placed on sight and visual perception at end of the 19th century is commonly cited as one of the principal influences on painting of the modern period.[195] Klimt's use of the telescope can be seen to facilitate this investigation into visual perception by augmenting and revealing the functions of the human eye.[196] Such telescopic devices enabled his observation of optical phenomena such as the flattening of pictorial space, the magnification of details hidden from the naked eye and the observation of optical focussing. Simultaneously, the telescope could function as a practical framing tool or viewfinder.

Throughout art history many different viewing devices have been used as transcribing instruments: windows, mirrors, screens, lenses, the camera obscura and the camera lucida as well as more recent technologies such as the photographic camera and the digital screen[197] (Figures 10, 11, 12). These devices facilitate the translation of visual information from three-dimensional space onto a two-dimensional picture plane, through a quantifiable and manageable system of relational and planar measurements. That Klimt regularly used a viewfinder[198] as well as the telescope may help explain the conception that his landscapes function as a type of screen.[199] Just like the well-known drafting technique of closing one eye to see objects in relationship to one another, the monocular telescope would similarly facilitate the flattening of pictorial space by limiting binocular stereopsis.[200] Klimt's telescope and opera glasses are a somewhat unusual example of optical tools in the service of a pictorial transcription system.

194 Wagner concludes that Klimt's use of the telescope transforms the landscape into a detached and incorporeal world resonant with Nietzsche's idea of the Apollonian dream state, an enchanted realm of beautiful illusion, ibid., 170.

195 Richard R. Brettell, *Modern Art 1859-1951* (Oxford: Oxford University Press, 1999), 83.

196 The idea of the telescope as an extension of the eye has been conceptualised since the early 1600s by many writers, see Antoni Malet, "Early Conceptualizations of the Telescope as an Optical Instrument," *Early Science and Medicine* 10, no. 2 (2005): 246-50, http://www.jstor.org.virtual.anu.edu.au/stable/4130312

197 For a history of perspective viewers and machines see Martin Kemp, *The Science of Art: Optical themes in Western Art from Brunelleschi to Seurat* (New Haven: Yale University Press, 1990), 167-220.

198 Wagner, "Klimt's Landscapes," in *Gustav Klimt, Landscapes*, 164.

199 Dolp, "Viennese Moderne," 257.

200 Margaret Livingstone, *Vision and Art: The Biology of Seeing* (New York: Harry N. Abrams, 2002), 104.

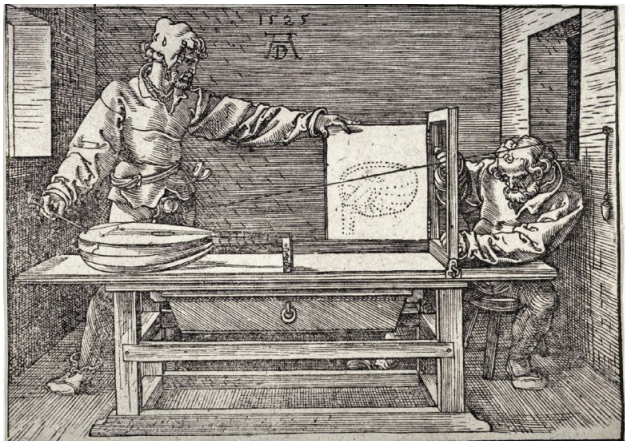

Figure 10. Albrecht Dürer, *Man Drawing a Lute or The Draughtsman of the Lute*, (1525).

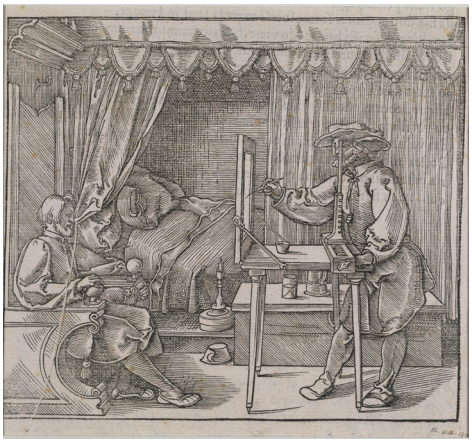

Figure 11. Albrecht Dürer, *A draughtsman drawing a portrait*, (1532).

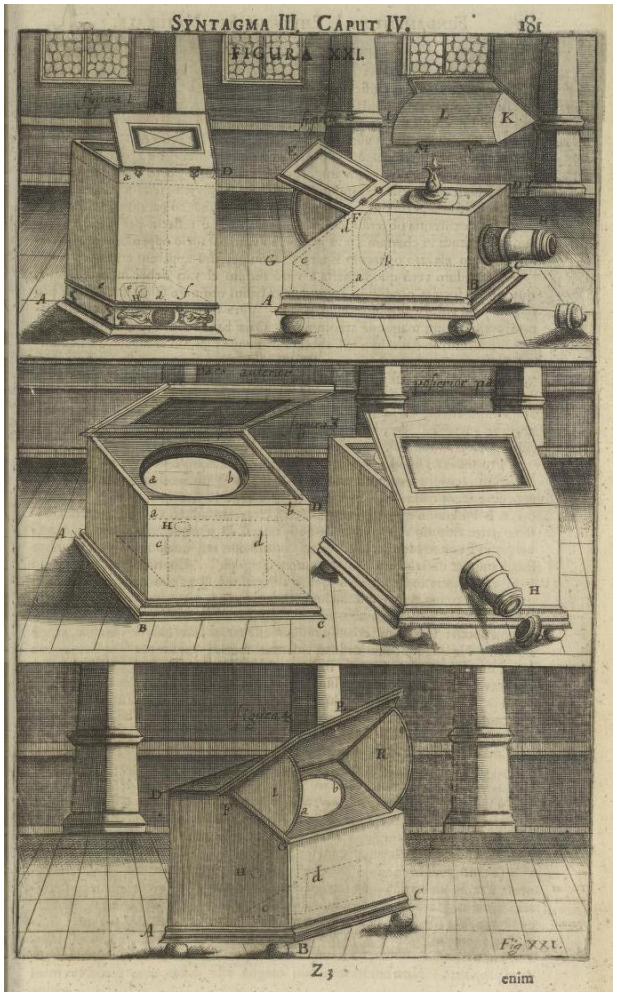

Figure 12. Illustration of various Camera Obscuras, (1685).

It is not coincidental that Klimt's landscapes are often described as close ups or close perspectives[201] as telescopes magnify visual information. Not only can the telescope reveal details invisible to the naked eye, it can also arrest vision. While the camera might freeze a single moment of time, the telescope allows the viewer to observe optical phenomena we cannot perceive in real time, such as the observation of a view going slowly in and out of focus, an action that occurs quickly within our own visual system. The telescope shows this visual mechanism as a slow incremental action.

Just like the opera glasses of today, 19th century examples use a dial to slowly bring the image into focus.[202] This focal apparatus imitates the basic focussing capabilities of the human eye, a function that is normally imperceptible to us. The mechanism captures the activity of bringing the subject into focus at any given point within a depth of field.

In the 21st century we witness this regularly, with camera zooms on digital screens and personal devices. In the late 19th and early 20th century however, the spectacle of images slowly moving in and out of focus, and the breakdown of vision that occurs within this process would have been a rare sight, limited to optical instruments such as microscopes, telescopes, opera glasses and early telephoto lenses.[203] This focussing action may have allowed Klimt to observe flat tessellations of shape and colour slowly forming and dissolving through the opera glasses. This phenomenon may also have been accentuated by the limited magnification of the optical devices Klimt used. [204]

201 Gottfried Fliedl, *Gustav Klimt 1862-1918* (Cologne: Benedikt Taschen, 1989), 178.

202 Greivenkamp, "The History of Telescopes," 10.

203 Wagner, "Klimt's Landscapes," in *Gustav Klimt, Landscapes*, 166.

204 Alfred Weidinger identified the telescope Klimt is using within the photograph at the landing stage as one similar to a 1905 model with a magnification of 10x. See ibid., 165. While long range magnification was possible with field and prismatic binoculars, see Greivenkamp, "The History of Telescopes," 12-17, opera glasses from the 19th century through to modern models have maintained a limited magnification of 2x–5x, as they are designed for indoor use and for a set distance to the theatre stage. As both Klimt's devices had a limited magnification, when looking at a view beyond this range of magnification, some parts of the image may have become blurred or out of focus, forming more generalised areas of flat colour and shape.

Pictorial flatness

While an increasing assertion of flatness was a typical characteristic of much landscape painting around the end of the 19th century, this, as Wagner concedes, was not due to the widespread use of telescopes.[205] Modernism's 'Road to Flatness' undeniably arose out of a myriad of factors including the reproduction of images through photography, lithography and other forms of printing; increased exposure to non-Western Art; the proliferation of art museums; and changes in social and political structures.[206] In Klimt's particular case, his use of pictorial flatness is often cited as being related to an interest in French Pointillism,[207] Byzantine mosaics,[208] Japanese Art,[209] photography,[210] and a modernist engagement with seeing and perception.[211] I speculate that Klimt's interest in visual planarity was similarly reinforced by the direct observation of optical flattening through the telescope, the limited focal range of the devices, and/or the purposeful manipulation of the focal mechanism.

205 Wagner, "Klimt's Landscapes," in *Gustav Klimt, Landscapes*, 164.

206 Brettell, *Modern Art*, 49-78.

207 Clare A. P. Willsdon, "Aspects of Klimt's Landscapes and the Emblem Tradition," in *Emblematic Tendencies in Art and Literature of the Twentieth Century, Glasgow Emblem Studies Vol. 10*, eds. Anthony J. Harper, Ingrid Höpel and Susan Sirc, (Glasgow: University of Glasgow, 2005), 35.

208 Robert S. Nelson, "Modernism's Byzantium Byzantium's Modernism" in *Byzantium/Modernism:* The Byzantine as Method in Modernity, eds. Roland Betancourt and Maria Taroutina, (Brill: Leiden, 2015), 18.

209 Gustav Klimt quoted in Fliedl, *Gustav Klimt 1862-1918*, 174.

210 Wagner, "Klimt's Landscapes," in *Gustav Klimt, Landscapes*, 166-67

211 Willsdon, "Aspects of Klimt's Landscapes," 27.

The Photocopier as a limited magnifying lens

In relation to my own research, I recognised that the magnifying function of the telescope held similarities to a zoom lens on a camera and by extension the enlargement function on a photocopier. The dotted surface of Klimt's landscapes was visually similar to the breakdown of information occurring in my own enlarged photocopies (Figure 13).

Magnification produced a broad, formal organisation of visual information, which often reinforced a flattening of space. The resulting pixilation also offered new solutions for applying the paint to the plate surface. The watercolours and gouache paints frequently slid or pooled across the non-absorbent plastic plate. If I used large brushes to apply paint across sections of the plate, the surface tension in the water-based paints tended to break, causing the paint to puddle or run. While this allowed me to generate a range of textures, it was difficult to deliver dense areas of colour. By transcribing the small pixelated marks in the photocopies with a small brush I could achieve a more reliable coverage of paint to the surface, and deliver colour more solidly to the plate (Figures 14, 15).

While photocopying provided a way to increase the size of my working images, I was still limited by the size of the press bed I had access to off-campus. If I wanted to increase the overall size of my images, I needed to paint the image across two or more plates. The press I was using had a very long and thin bed. My initial solution to scaling up was to utilise the entire press bed surface, making a panoramic format image. By placing the plates end to end along the press bed, I could transfer them all at the same time onto one sheet of paper. After early experiments I changed my approach to paint the images across several plates and then print each plate individually, reassembling the pieces later to form one larger image. As a single photograph did not have the correct height to depth ratio for this long format, I first had to restructure the photographic imagery.

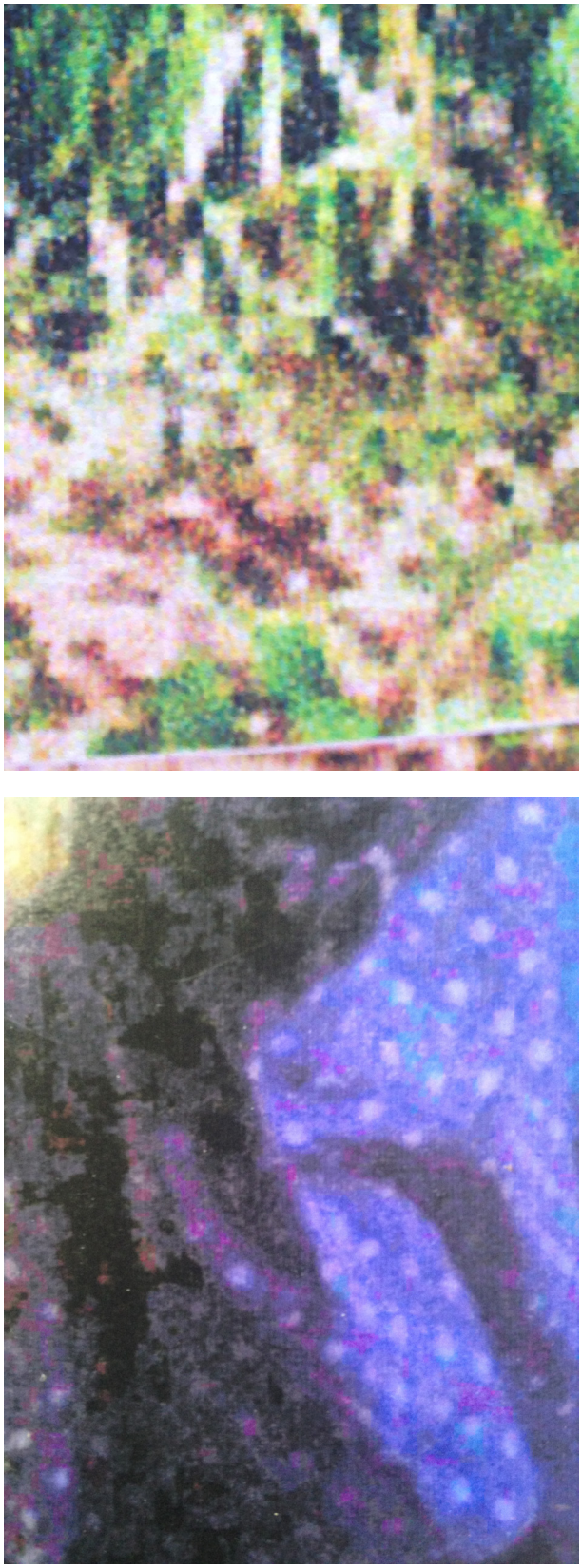

Figure 13. Source material photocopies, (2015).

Figure 14. *Conservatory no. 2*, (2015), detail. The plants are constructed using small, dense brush marks, while the background is made using a broader brush creating washy textures.

Figure 15. *The present is the key to the past is the key to the future*, (2015), detail.

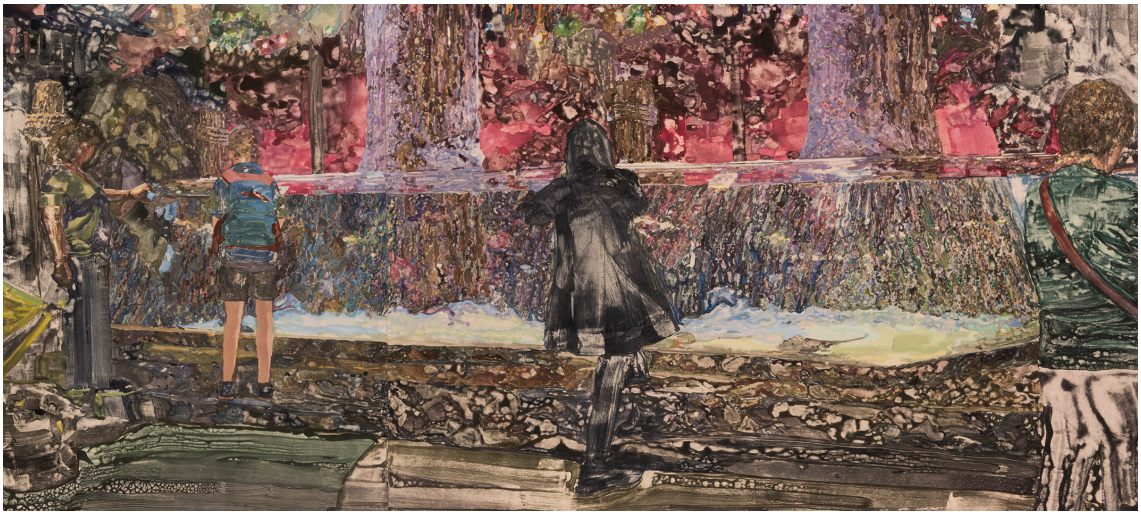

Figure 16. *Treasure Island no. 2*, (2016).

Collage and Memory

Using photographs I had taken on a visit to the Sydney aquarium, I chose to work with a photograph depicting a large fish tank shaped like a circular bubble. I thought that the photographs had somehow distorted the shape of the tank as I remembered it to be more elliptical. Looking at the photocopies I noticed two sections of the tank overlapping each other that simultaneously elongated its shape and echoed the panoramic shape I had in my memory.

I began to collage multiple fragments of the aquarium together, creating a new shape for the tank, tilting sections of photographs and combining other viewpoints (Figure 16). This initial experiment revealed how collage offered ways to reformat my imagery while simultaneously allowing me to engage with my source material in a fundamentally new way relating to memory.

I became more aware of gaps or inconsistencies between my memories of the locations and the photographs themselves. This seemed to echo Berger's statement that, "between the moment recorded and the present moment of looking at the photograph, there is an abyss."[212] Often many months lay between when I had taken the photographs and when I was making my collages, which seemed to only accentuate this 'abyss'. My memories included details that were not evidenced by the photographs, while the photographs showed things that I did not remember.

I questioned how I could possibly reconstruct my experience of a site given the fallible and imperfect nature of memory. This experience of the nature of memory was, however, a source of insight: through mutability, memory reveals itself to be a continually mobile process, transformed by the neurological and psychological processes of reconsolidation.[213] In other words, although memories might seem real, they are often full of errors and are "actually elaborate fabrications." [214] This concept, as described by Jonah Lehrer, seemed to resonate with the physical processes of collage: that of gathering divergent pieces of information together to construct something new. In this way, collage provided a way to transform the unilinear nature of photography into a non-linear or 'radial' embodiment of memory. [215]

212 John Berger, *Understanding a Photograph* (New York: Aperture Foundation, 2013), 56.

213 Jonah Lehrer, *Proust was a Neuroscientist* (Boston: Houghton Mifflin Books. 2008), 84.

214 Ibid., 82.

215 John Berger, *About Looking* (London: Writers and Readers Publishing Cooperative, 1980), 60.

In response to this idea, I began to work more intuitively, joining up sections using colour, tone or pattern as a guide. I reflected that this process was rather like piecing a jigsaw puzzle together, without knowing what the completed image might be. Some objects or structures within an image seemed to be more prominent in my memories and the resulting collage reflected this emphasis. This can be seen in the collage for *Vivarium no. 1* (Figure 17), where I pieced together photographic details with a high level of visual acuity to reconstruct a complex coral garden inside the aquarium.

Figure 17. Collage for *Vivarium no. 1*, (2015), detail.

In contrast, other areas, often around the edges of images, remained persistently vacant. I attempted a variety of approaches to negotiate these areas where I had 'drawn a blank' – manufacturing information by collaging slices of coloured offcuts together or blocking in the area with colour, texture or pattern (Figure 18); or I left these areas empty, forming asymmetrical collages as a kind of physical acknowledgment of these 'blind spots' (Figure 19).

When I started to make collages for *Conservatory no. 1* (Figure 20) and *Conservatory no. 2* (Figure 21), the notion of memory as being 'elaborate fabrication' became more pronounced. These collages were based on photographs that were taken several years previously and this made my memory of the location even more uncertain. As I only had a small number of photographs from this site, I constructed these compositions by making multiple copies of the photographs I already had, and enlarging, reducing, reversing and mirroring the images to form reimagined conglomerates of information. I assembled large plant centrepieces by cutting out individual branches and fronds and placing them together in half-remembered, half-invented configurations. By repeating architectural details such as windows, or ceiling beams, I attempted to reconstruct the conservatory architecture.

In *Conservatory no. 2* (Figure 22) I adopted an irregular format, reflecting the fact that I could not remember certain areas, so I literally left them out. The resulting image erosion of the monotype, the multiple vanishing points, and distorted perspectival spaces, reflected the uncertainty of how this space hung together in my mind, containing gaps and missing information.

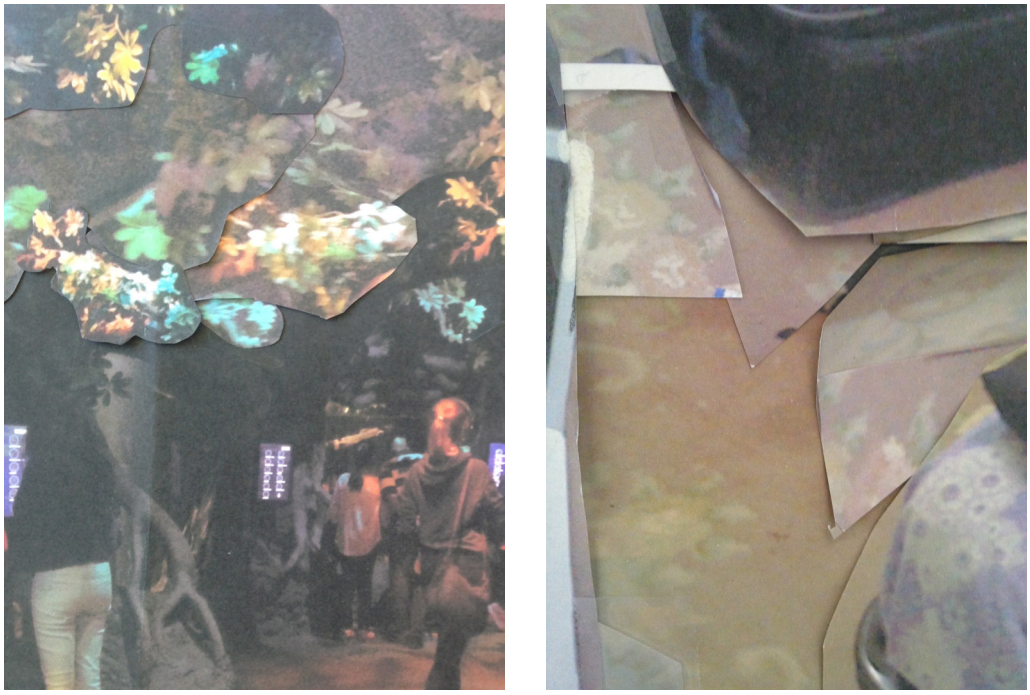

Figure 18. Different collage approaches to address 'blank space.' Left, *Collage for Mangrove study*, (2015), detail. Photo-collage on paper, dimensions variable. Right, *Collage for bedroom study*, (2015) detail. Photo-collage on paper, dimensions variable.

Figure 19. *Collage for Bedroom study*, (2015). Collage in asymmetrical format.

Figure 20. *Collage for Conservatory no. 1*, (2015) detail.

Figure 21. *Collage for Conservatory no. 2*, (2015), detail.

Figure 22. *Conservatory no. 2*, (2015).

Creative Remembrance

I reflected on how the collage process was embodying a type of creative remembering or equally, creative forgetting. The strict perspectival order of the photographic image, bound to a linear perspectival system, did not seem to correlate with my memories of the bodily experience of these locations. I experienced them through a moving body, over a period of time and through the locus of my memories, rather than through a single fixed point in space, captured by the camera. While these collaged compositions remained spaces informed by photography, they ultimately were formed through a combination of compositional experimentation and creative remembrance.

Mamma Andersson

The concept of creative remembrance is also present in the work of Mamma Andersson. Her process often involved "... quietly fixing appearances so they look alright even if they are in fact deceptive..."[216] I recognised that Andersson utilised repetition and multiples in ways similar to my own experimentation. In discussing Andersson's *Blank Memories Always Open From The South* (Figure 23), Martin Herbert observes that the buildings:

> ... initially appear... consistently representational. But the line of turreted dwellings is actually a short cluster repeated and conjoined, as if someone had tried to recall the scene and, finding portions of their memory literally 'blank', had filled them in sneakily with repeats.[217]

Figure 23. Mamma Andersson, *Blank Memories Always Open from the South*, (2002).

216 Martin Herbert, "Rewind," *Modern Painters*, (December 2004/January 2005): 50.

217 Ibid.

Martin Hentschel argues that Andersson's seeking out of photographic motifs from her past and the device of repeats and mirroring are a way to negotiate this imaginative remembrance.[218]

My own use of repeated, fragmented and multiple images created temporal and spatial ambiguities comparable to those in Andersson's work. The processes of collage including fragmentation, repetition, reversal and mirroring allowed me to condense multiple moments of time and space into one image. Heidi Zuckerman Jacobson observes that the representational uncertainty arising from Andersson's processes could be compared to the flattening of time that occurs within memory,[219] while asserting that spatial and temporal ambiguities induce an activity comparable to remembering within the viewer.[220] This reverberation between the process of making the work and the process of looking at the work seemed to form a cyclical dialectic between both seeing and remembering and the maker and the viewer. It also highlighted the difference between photographic vision and a human understanding of the world.

218 Martin Hentschel ed. *Mamma Andersson: Dog Days* (Kunstmuseen Krefeld, Bielefeld: Kerber Verlag, 2012), 29.

219 Heidi Zuckerman Jacobson, "Save me from this darkness" in *Mamma Andersson* ed. Matthew Thompson (Aspen Art Museum, Aspen: Aspen Art Press, 2010), 46.

220 Ibid.

Picturing Human Vision

The way in which the camera fixes an image of the world is very different to the way we experience it within the body. Nor is photography a definitive way to express how we experience the world in an embodied way. In 1983, David Hockney observed:

> … photography is all right if you don't mind looking at the world from the point of view of a paralysed cyclops—*for a split second*. But that's not what it's like to live in the world, or to convey the experience of living in the world.[221]

In other words, the way the camera pictures the world is not how we see or experience it. Instead, we experience it through a moving body, from multiple points of view and over time. Hockney's practice congregates within this field of difference, negotiating, visualising and highlighting the variations between photographic vision and the human experience.

David Hockney

Hockney's practice has long been engaged with the relationship between photographic images, human vision and images made by the human body. He has regularly used photo-collage or photomontage to readdress the "tyranny of one-point perspective"[222] and the single, arrested moment of time captured in the photograph. This can be illustrated by works such as *Mother, Bradford, Yorkshire 4th May 1982* (Figure 24), where a system of gridded polaroids are used to visually map or scan the figure, echoing the movement of the human eyes and head.

In *Chair, Jardin du Luxembourg, Paris, 10th August 1985* (Figure 25), multiple photographic viewpoints are collaged together, visualising the changing experience of the chair as Hockney moves around it. The work *The Four Seasons, Wolgate Woods 2010-11* (Figure 26), was created using nine video cameras fastened together in a grid, attached to a car. The cameras film the view as the car is driven down the same country lane each season of the year. This work not only visualises how optical understanding may change with movement through space and multiple points of perspective, but also considers how time affects optical perception, with the understanding of the same location being visually transformed by the cycle of the seasons.

221 David Hockney quoted in Lawrence Weschler, *True to Life: Twenty-Five Years of Conversations with David Hockney* (University of California Press: Berkeley, 2008), 6.

222 David Hockney "A Bigger Picture," *Start the Week with Andrew Marr* Podcast on BBC Radio 4, 2011, http://www.bbc.co.uk/programmes/b018g2yz

Figure 24. David Hockney, *Mother, Bradford, Yorkshire 4th May 1982*, (1982).

Figure 25. David Hockney, *Chair, Jardin du Luxembourg, Paris, 10th August 1985*, (1985).

Figure 26. David Hockney, *Winter, 2010*, (2010-11). Video still from *The Four Seasons, Woldgate Woods, 2010-11.*

By creating a collage containing a fractured view that disrupts the unified vision of the photograph, Hockney realised,

> … that this sort of picture came closer to how we actually see, which is to say, not all at once but rather in discrete, separate glimpses, which we then build up into our continuous experience of the world.[223]

This reverberates with Simon Ings' comments on the nature of the images that we receive through the eye "… the picture we receive through our eyes is odd… [w]hich is to say: it is not a picture."[224]

I reflected that the shifting spaces and visual glitches I had created through collage could be viewed as an acknowledgement of the bodily adjustments we make while looking and the mutability of our optical system that constantly processes, translates and reassembles information in complex ways.

Collage and Embodied Vision

When I reconsidered my photographic documentation, I remembered these locations not just as the camera recorded them. Instead I recall experiencing them in a physical way: walking through space, craning my head around obstacles and people, circling around objects and observing from multiple points of view. I had often spent long periods of time in these locations, with repeated visits in some instances, experiencing the location at different times of day or different times of the year. Collaging multiple images together was more akin with how I had experienced these locations within my body: from multiple points in space and over time. Within my mind these points in space and moments of time were not ordered in linear ways, but were constantly shifting and reforming.

223 Hockney in Weschler, *True to Life*, 10.

224 Ings, *The Eye*, 39.

Spatial and temporal repeats

In response to this, my collages began to include objects or figures that were duplicated across the image or seen from different viewpoints all at once. For example in *Something like forgetting* (Figure 27), a figure reappears in several different places around the composition, and the single fish tank becomes two separate objects seen from different angles. These repeated figures or objects reinforce a sense of a looped or circular nature to both the depiction of space and the notion of time within the images.

The perspectival distortions and visual glitches resulting from collage additionally began to create a sense of a bending pictorial space. It brought to mind optical illusions of 'impossible objects' such as *The Penrose Stairs* (Figure 28). In this illusion, a staircase forms a continuous loop, which can be climbed forever while never getting any higher, an impossibility in three dimensions.

I also connected this idea to impossible objects within fiction, specifically objects that contain an interior space much larger than their exterior dimensions.[225] My collaged images now began to echo these objects by giving the impression of containing a much bigger space than the confines of the picture plane, creating an illusionistic 'impossible space.' This was accentuated through the scale of the tiny brush marks in relation to the dimensions of the picture plane, creating a sense that a larger area existed inside the limits of the paper (Figure 29).

Figure 27. *Something like forgetting*, (2016).

225 Examples such as the TARDIS in the Dr. Who TV series, Mary Poppins' carpetbag, various magical objects in the Harry Potter universe and the wardrobe from The Chronicles of Narnia.

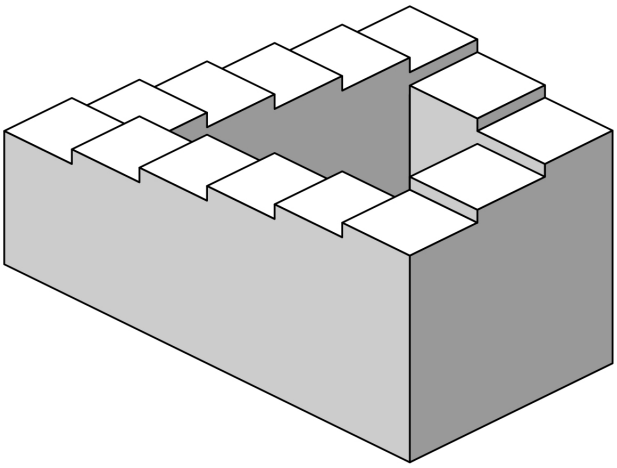

Figure 28. Lionel and Roger Penrose, *The Penrose Stairs* or *Penrose Steps*, (1959). This optical illusion is also known as the continuous or impossible staircase.

Figure 29. *Conservatory no. 1*, (2015).

The Figure

As I developed these works I also examined the role of the human figure within them. The nature of my source photographs, casual snapshots taken in public or tourist locations, often resulted in back facing figures. These back facing figures or *Rückenfiguren,* repeat the position that the viewer takes in front of the work.

The use of the *Rückenfigur* or 'back figure' in German, is a pictorial device dating from the ancient world,[226] though appearing in the Western painting tradition around the 13th century in paintings by Giotto di Bondone and Jan van Eyck.[227] Early *Rückenfiguren*, like those depicted by van Eyck and Giotto, were primarily side motifs, operating as compositional or spatial devices rather than being the central subject.

In Giotto's *Lamentation of Christ*, there are several figures with their backs to the scene in the foreground (Figure 30). These *Rückenfiguren* create a strange compactness of pictorial space. Giotto often suggests a figure's position in space by overlapping. As other spatial devices such as atmospheric, colour or linear perspective are absent, these overlapped figures often form spatial anomalies, seeming to occupy a paper-thin depth as if the figures were glued together in the same plane.[228] In Giotto's depiction of space "the viewer does not receive cues as to how far apart pictorial objects are, or how 'deep' the foreshortened planes and objects go." [229] The solidity and planarity of the wall that the frescos are painted onto, combined with the *Rückenfiguren* in this example, reinforce a peculiar compression of space.[230]

226 Margarete Koch in Kunibert Bering and Rolf Niehoff, *Visual Profiency: A Perspective on Art Education*, trans. Margaret Hiley (Oberhausen: Athena Verlag, 2015), 60.

227 Joseph Leo Koerner, *Caspar David Friedrich and the subject of landscape* (London: Reaktion Books, 1990), 162.

228 William V. Dunning, *Changing Images of Pictorial Space: A History of Spatial Illusion in Painting* (Syracuse: Syracuse University Press, 1991), 28.

229 Samuel Edgerton in ibid.

230 Dunning in ibid.

Figure 30. Giotto di Bondone, *Lamentation of Christ*, (c.1305).

However, Caspar David Friedrich's continual use of *Rückenfiguren*[231] has concentrated the art historical critique of the trope onto Friedrich's oeuvre (Figure 31). Joseph Leo Koerner proposes that Friedrich's use of *Rückenfiguren* redefines landscape as experiential, depicting the landscape as "the encounter of subject with world." [232] The *Rückenfigur* is a device that mediates the viewer's own experience of the scene shown,[233] or as Elizabeth Prettejohn succinctly contends, "we look *with* not merely *at*, the *Rückenfigur*."[234] The *Rückenfigur* causes this effect by repeating the viewer's position of looking[235] and by anonymising or universalising the figure.[236]

This echoing aspect of the *Rückenfigur* can be considered recursive, a term defined as an "action or an act of recurring or returning."[237] The term recursion is also understood in common usage via the term *meta-*, meaning a concept that is self-referential or self-reflexive. While the *Rückenfigur* has many interpretations in art historical discourse covering themes of politics,[238] melancholia,[239] and isolation,[240] within my research the *Rückenfigur* is a pictorial device primarily concerned with self-reflexivity—with 'looking at looking.' This is typified in my photographs of other people taking photographs: a self-reflexive reverberation of myself as photographer, a self-conscious narrator, looking at others looking (Figure 32). This self-reflexive interpretation of the *Rückenfigur* also underscores the paradoxical qualities of the liminal and virtual aspects of images within my project.

231 Koerner, *Casper David Friedrich*, 182.

232 Ibid., 163.

233 Ibid., 181.

234 Elizabeth Prettejohn, *Beauty and Art: 1750-2000*. (Oxford: Oxford University Press, 2005), 56.

235 Koerner, *Caspar David Friedrich*, 182.

236 Ibid., 179.

237 *Oxford English Dictionary*, s.v. "*Rückenfigur*," accessed 6 January 2017. http://www.oed.com.virtual.anu.edu.au/view/Entry/160102?redirectedFrom=recursion#eid

238 Koerner, *Caspar David Friedrich*, 243.

239 Barbara Maria Stafford, *Echo Objects: The Cognitive Work of Images* (Chicago: University of Chicago Press, 2007), 80.

240 Hans Sedlmayr, *Art in Crisis: The Lost Centre*, trans. Brian Battershaw. (New Brunswick and London: Transaction Publishers, 2007), 121.

Figure 31. Caspar David Friedrich, *Woman at a Window*, (1822).

The *Rückenfigur* can create a sense of distance from the viewer by hiding with the back facing body, "the very thing repeated: the gaze of the subject."[241] Therefore, the *Rückenfigur* is an innately enigmatic device. The viewer is placed virtually into the position of the *Rückenfigur* by echoing their stance in front of the painting, creating a repeated visualisation of themselves. Simultaneously the viewer is also excluded from the scene[242] due to the liminal threshold of the painting. Thus, in my research the *Rückenfigur* underlines both the liminal and virtual qualities of the painted world, while also repeating the liminal and virtual nature of the sites of my subject matter; the aquarium, the botanical glasshouse and the habitat diorama. The visual and conceptual aspects of these sites will be discussed in greater detail in Chapter Four.

Figure 32. *Vivarium no, 1*, (2016).

241 Koerner, *Caspar David Friedrich*, 182.

242 Ibid., 217.

Conclusion

During this phase in my research, I discovered that collage and photocopying had transformed the static representations of time and space in my photographs into conceptions that were more mutable and elastic. I found that collage detached the photographic image from a one-point perspective and its fixed relationship to time. It allowed me to recreate a sense of moving through a space by including multiple views and vanishing points. Through collage I could evoke the mobile action of human vision, which scans and gathers information from separate glimpses, accrued over time. Collage also echoed the processes of memory, which are by nature unstable and mobile. Therefore, while the spaces in my monotypes might seem somewhat real, like memories they are effectively part fact and part fiction.

Additionally, I began to connect the textures of the monotype to the visual qualities in my snapshots and the degradation that occurs through photocopying. I recognised that the porous quality of the surface of the monotype produces a sense of provisionality that echoes the fleeting and mobile nature of memory and of human vision. This mutability of the monotype arises from the paint being absorbed into the paper rather than sitting on top of it and from the erosion and indistinctness caused by the transfer process. Additionally, the lack of material weight the monotype exhibits comes from being an imprint. From these findings I concluded that the monotype constitutes an indexical image, reinforcing the relationship between photography and the monotype. I also concluded these monotypes were not only illusions of space existing in the outside world, they were equally representations of the inner workings of memory and the visual system.

In the next chapter I will examine the physical and visual qualities of the three primary locations of my subject matter; the aquarium, the botanical glasshouse and the habitat diorama. I will evaluate how these locations relate to my studio techniques and to the interpretation of my monotypes. I will demonstrate that these sites relate to the world of images and in particular to the mediated experience of the early 21st century through shared notions of virtuality and indexicality. Finally, I will propose that the amalgamation of photography, collage and painting in my research has created an original form of monotype process that provides new interpretations of the monotype within contemporary experience.

CHAPTER FOUR: VIRTUAL NATURE

2016-2017

Introduction

This chapter covers the final phase of my research, from 2016 to late 2017. In this chapter I will explain how my research came to focus on imagery drawn from three primary locations: the aquarium, the botanical glasshouse and the habitat diorama. I will discuss how my exploration of the material and formal qualities of the monotype became an effective vehicle for the interpretation and cultural analysis of these spaces of nature presented as public spectacle. I will argue that the visual and social qualities of such sites as the aquarium, the botanical glasshouse and the habitat diorama, constitute examples of the 19th century's "frenzy of the visible,"[243] resonant with aspects of our mediated experience of the world in the early 21st century.

I have found shared qualities in the aquarium, the botanical glasshouse and the habitat diorama which conceptually and metaphorically link them to the particular kinds of images central to my research: photography, painting and monotypes. I will demonstrate how these images and sites can be seen as connected through the notions of virtuality and indexicality.

My interest in these three sites started during the first year of my research. I had recently moved to Sydney and visited the Sydney Aquarium for the first time. Intrigued by the coloured luminescence of the fish, the curious shapes and forms of the coral and the hypnotic sway of the anemones, I left the aquarium that day with a season ticket. The aquarium became

243 Comolli, "Machines of the Visible," 109.

a regular retreat from the summer heat, the bustle of the city and the confines of my small apartment. In the evenings it was often empty and quiet and I would watch the various specimens, rapt in meditative wonder.

During the day however, the aquarium was vastly different, filled with tourists observing and photographing the displays. In these darkened rooms, the brightly lit fish tanks were curiously echoed across the room in the small squares of light emanating from people's camera phones. I thought the tank, like the smartphone screen, seemed to embody a threshold or window onto an imaginary zone, a view onto a possible other world. Through repeated engagement with this site, I saw the aquarium as a space that curated an encounter with nature, a space of visual spectacle and a space that was liminal; a quality that was integral to the world of images.

Similarly, the botanical glasshouse was a site that first attracted me as a quiet space through which I could reconnect to nature within the urban landscape. As apartment living precluded me from having a garden of my own, I spent more time visiting parks and gardens, often seeking out the shade of the fernery in the Royal Botanical Gardens. I became intrigued with the range of plants that could be grown within the protection of glasshouses, whose forms, colours and fragrance I found intriguing. The visual qualities of these buildings, encased by glass and filled with light, I found aesthetically appealing; although slightly paradoxical, being both spectacular and meditative.

As I researched the history and cultural significance of the botanical glasshouse and aquarium, I also observed the historical connection they held to the habitat diorama. As Australia does not have a robust tradition in diorama museum presentation,[244] I researched dioramas in natural history museums online, reviewed my own travel photographs and determined that I would visit natural history museums to document dioramas on fieldwork in Scandinavia.

I was particularly intrigued by the way these locations seemed to cause an intensification of experience. As I will demonstrate later in this chapter, these sites share specific aesthetic and virtual qualities that can lead to the intensification of sensory perception. This amplification of the senses repeats notions of the poetic and fantastical evident in Symbolist and Neo-Symbolist work of artists I had previously researched, such as Vuillard and Andersson. I was fascinated by historical accounts of the emergence of these three forms of visual culture and how they shared cultural, aesthetic and conceptual qualities born out of the 19th century's love for the spectacle of nature.

244 Karen Wonders, "Habitat Dioramas: Illusions of Wilderness in Museums of Natural History" (PhD thesis, Uppsala University, 1993), 12.

The Spectacle of Nature

The 19th century is marked by change. Advances in imaging, lighting, transportation, communication, engineering and manufacturing culminated to expand the realm of visible experience and concentrate the public's fascination on the optical.[245] These technical advances and a new sense of visuality, produced a vast accumulation of spectacles[246] such as daguerreotypes, photographs, prints and various visual entertainments.[247] The visible world was enlarged, and nowhere was this more focused than in the new visual pleasures that were found in nature. A 19th century love affair with the spectacle of nature ensued, influencing everything from philosophy to fashion. It precipitated an extraordinary interest in viewing, collecting, depicting and understanding the natural world (Figures 1, 2, 3).

From this unique combination of technological discovery, opticality and enthusiasm for the spectacle of nature sprang the inventions of the aquarium, the botanical glasshouse and the habitat diorama. These constructed spaces became essential for private and public collection and display of natural species. They also became part of the infrastructure in many natural science institutions that were subsequently formed during the 19th century museum movement. I will briefly outline the inventions that precipitated the aquarium, glasshouse and diorama and define these terms and my use of them.

245 Comolli, "Machines of the Visible," 109.

246 Ibid.

247 Armstrong, *Victorian Glassworlds*, 332-33.

Figure 1. Charles Morrison (collector), *page from an album of pressed seaweed specimens collected around Port Phillip Bay, Australia*, (1859-1882).

Figure 2. Nicholas Chevalier, *Fancy dress costume*, (1860). Chevalier designed a costume 'emblematic of Australia' for Lady Anne Barkly, whose husband was the governor of Victoria 1856-63. The dress was edged with embroidered fern fronds.

Figure 3. Lady Paulina Trevelyan (designer), Miss S. Sanson (maker). *Handkerchief trimmed with bobbin lace in a pattern of ferns*, (1864). Honiton lace depicting various English species of ferns such as Hart's tongue fern (Asplenium scolopendrium), Rusty back fern (Asplenium ceterach), Male fern (Dryopteris felix-mas) and Hard fern (Blechnum spicant).

Aquariums

Multiple technologies from the early 1800s such as Cages à la Power,[248] The Warrington Case,[249] and water aeration techniques,[250] contributed to the invention of the modern aquarium. Prior to these advances aquatic specimens tended to die of asphyxiation.[251]
A variety of terms such as aquaria, aqua-vivarium, cabinet vivaria and paludariums[252] were used throughout the 19th century to describe a tank that held, maintained and displayed aquatic specimens. These terms were eventually replaced by the word *aquarium*, which was coined by Philip Henry Gosse in 1854[253] (Figures 4, 5).

Botanical Greenhouses

Placing plants into warm protected enclosures, such as the practice of overwintering fruit trees, has existed since Roman times. However, in 1829, English surgeon Nathaniel Ward invented a portable self-sustaining glass container or terrarium, which permitted the simultaneous display and keeping of plants.[254] This invention, The Wardian Case, allowed plants to survive and grow outside of their normal climatic environment while also providing a way to transport plants from remote locations.[255]

The Wardian Case terrarium became the prototype technology that precipitated the golden age of botanical glasshouses during the 19th century[256] (Figures 6, 7). During the 1800s Wardian Cases and botanical glasshouses were a fashionable addition to private homes (Figure 8) and were also incorporated into institutions such as zoological or botanical gardens. The Wardian Case diversified into multi-purpose enclosures to keep plants, insects and aquatic specimens together (Figure 9). In this text I will use the term glasshouse, though other terminology such as greenhouse, hothouse or conservatory are common in contemporary and historical usage.

248 Around 1830, marine biologist Jeanne Villepreux-Power invented a water circulation system ensuring the survival of aquatic animals. Retrospectively she has been seen as the unaccredited inventor of the aquarium rather than the more frequently cited Philip Henry Gosse and Robert Warington. See Bernd Brunner, *The Ocean at Home: An Illustrated History of the Aquarium* (London: Reaktion Books, 2011), 30-31.

249 In 1850, Robert Warington found that adding plants to aquatic tanks achieved water oxygenation and supported aquatic specimens. Although he is often cited as one of the inventors of the aquarium, initially named the Warrington Case (misspelt with an extra *r*), Jeanne Villepreux Power's inventions predate Warington's findings. See Lynn Barber, *The Heyday of Natural History 1820-1870* (Garden City NY: Doubleday, 1980), 116.

250 Anna Thynnes found that by pouring water backwards and forwards aerated the water, keeping specimens alive for longer. See ibid., 115-16.

251 Celeste Olalquiaga, *The Artificial Kingdom: A Treasury of the Kitsch Experience* (London: Bloomsbury Publishing, 1999), 48.

252 Ibid., 51.

253 Brunner, *The Ocean at Home*, 39.

254 Olalquiaga, *The Artificial Kingdom*, 46.

255 Ibid.

256 Richard Mabey, *The Cabaret of Plants: Botany and the Imagination* (London: Profile Books, 2015), 253.

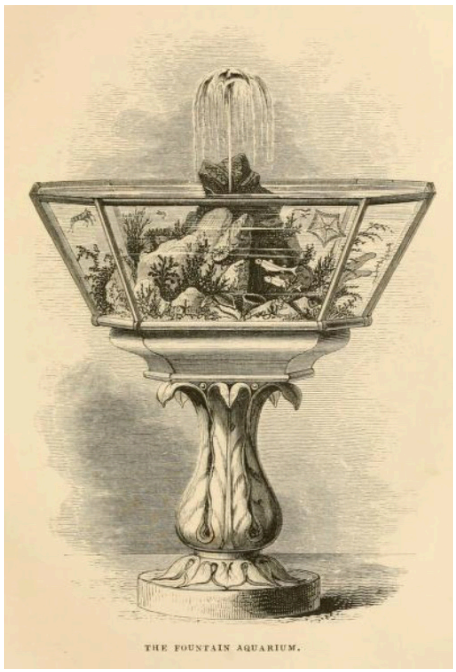

Figure 4. Emily Bowes Gosse, (unattributed), *Parlour fountain aquarium* (1854).

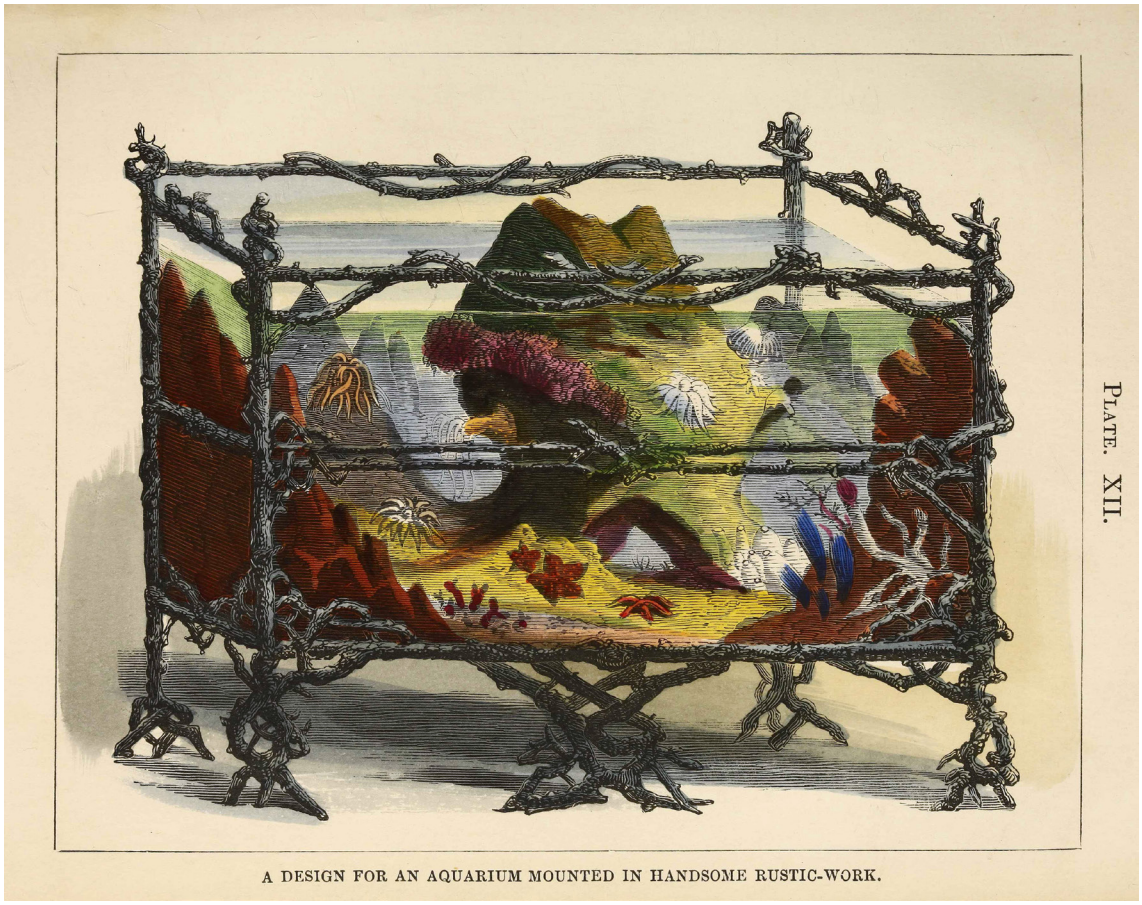

Figure 5. *A design for an aquarium mounted in handsome rustic-work*, (1857).

Figure 6. *University of Copenhagen Botanical Garden*, (2005), showing The Palm House built in 1874. Photo: Fabrizio Morroia.

Figure 7. *The Waterlily House interior, Kew Gardens*, built in 1852. Photo taken on fieldwork October 2016.

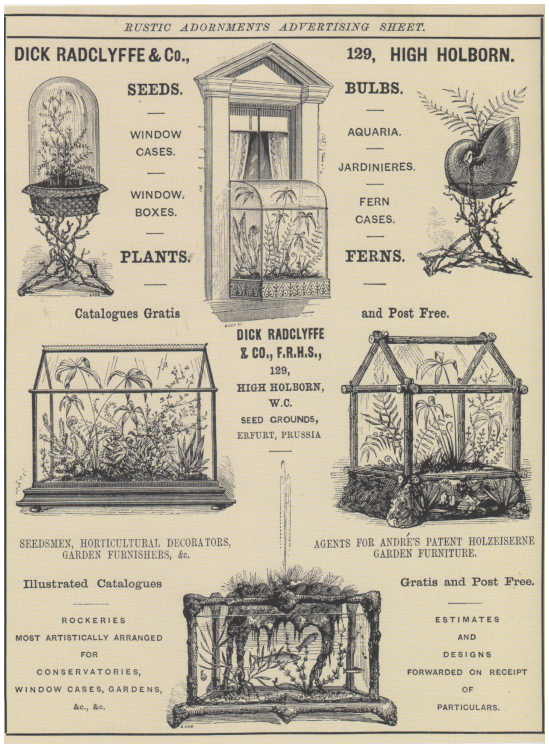

Figure 8. Advertising sheet showing various adaptations of Wardian cases for sale from Dick Radclyffe & Co. London. (c.1872-80).

Figure 9. Illustration of a Vivarium or Insect Home, from *The Butterfly Vivarium or Insect House* by Henry Noel Humpreys, (1858).

Figure 10. *Bird diorama*, Swedish Museum of Natural History, Stockholm. Photo: Daderot, (2014).

Habitat Dioramas

The word diorama is derived from the Greek *dia* meaning 'through' and *horama* meaning "what is seen,"[257] producing the meaning of "through sight."[258] Coined in 1822 by Louis Daguerre, later renowned for the invention of the daguerreotype, the original usage of the term diorama referred to an adaptation of the 19th century entertainment panorama.[259] By the end of the 19th century, this usage had all but died out.[260]

During the late 19th and early 20th century however, a revival of the term took hold to describe an illusionary display, often used in a museological context. This understanding of the diorama remains to this day, denoting a model, frequently consisting of a three-dimensional foreground with a two-dimensional painted background[261] (Figure 10).

Although the usage of the term *habitat diorama* was often interchanged with *habitat group* up until 1920s-30s, the development of the habitat diorama phenomenon is intimately linked to the museum movement of the 19th century.[262] In Europe the earliest dioramas were built in Sweden during the 1870s-1890s in one of the first precursors of the natural history museum, the biological museum.[263] In the United States, the first true habitat diorama was built for the Milwaukee Public Museum in 1889.[264] In this text, I will refer specifically to habitat dioramas that recreate scenes of animals, nature and landscape.

257 *Oxford English Dictionary Online*, s.v. "diorama," accessed 3 September 2017, http://www.oed.com.virtual.anu.edu.au/view/Entry/53116?redirectedFrom=diorama#eid

258 Wonders, "Habitat Dioramas," 12.

259 Ibid., 12-13.

260 Ibid., 13.

261 Clarke, *The Concise Oxford Dictionary of Art Terms*, s.v. "diorama," accessed 3 September 2017, http://www.oxfordartonline.com/subscriber/article/opr/t4/e586?q=diorama&search=quick&pos=2&_start=1#firsthit

262 Wonders, "Habitat Dioramas," 10.

263 Claudia Kamcke and Rainer Hutterer, "History of Dioramas," in *Natural History Dioramas: History, Construction and Educational Role*, eds. Sue Dale Tunnicliffe and Annette Scheersoi (New York: Springer, 2015), 15.

264 Ibid., 18.

Expansion of the Visible World

The popularity of nature in the 19th century was due to the expansion of the visible world. This included optical expansion through continued developments in optical devices such as microscopes, telescopes, cameras, binoculars and eyeglasses, which made previously invisible natural phenomena visible.[265, 266] This was combined with the reproduction and dissemination of images through the new technologies of the daguerreotype, photography and printing techniques. Gaslight burgeoned throughout the century and electric arc lights became commercially available during the 1870s.[267] Artificial light added clarity to the visible realm as well as extending the world temporally, allowing people more time to work, write, read, study and above all, look.

The expansion of the visible world was also experienced geographically,[268] with a widespread fascination in nature fuelled by the discovery of a myriad of new species, previously unseen, transported to Europe by the modernised steamboat from foreign shores. In Britain, the popularity of collecting specimens from nature was greatly influenced by the extension of the railways.[269] City dwellers could travel to the countryside or the coast with ease and at minimal cost where they could catch butterflies and bugs or search the shore for shells or seaweeds.

Throughout the 1800s, the world was also enlarged socially. Previous collection practices like cabinets of curiosities from the 16th-18th centuries, were usually private collections, (Figure 11) the sole province of the wealthy elite,[270] the educated professional and an almost exclusively male realm. New technologies like the aquarium and the glasshouse made nature more accessible and collecting more affordable to the middle class and countless amateurs. These inventions also domesticated nature, making nature-inspired activities; incorporating ornamentation, entertainment and education, an acceptable pastime for women[271] (Figures 12, 13). Subsequently, over the course of the 19th century and into the early 20th century, women across the social spectrum became the popularisers of nature.[272]

265 Lynn L. Merrill, *The Romance of Victorian Natural History* (Oxford: Oxford University Press, 1989), 120.

266 Barbara Maria Stafford and Frances Terpak, *Devices of Wonder: From the World in a Box to Images on a Screen* (Los Angeles: Getty Research Institute, 2001), 6-7.

267 Michael Windelspecht, *Groundbreaking Scientific Experiments, Inventions and Discoveries of the 19th Century*, (Westport and London: Greenwood Press, 2003), 61.

268 Comolli, "Machines of the Visible," 109.

269 Brunner, *The Ocean at Home*, 12.

270 Olalquiaga, *The Artificial Kingdom*, 235.

271 Ibid., 281.

272 Barbara T. Gates, *Kindred Nature: Victorian and Edwardian Women Embrace the Living World* (Chicago: The University of Chicago Press, 1998), 36.

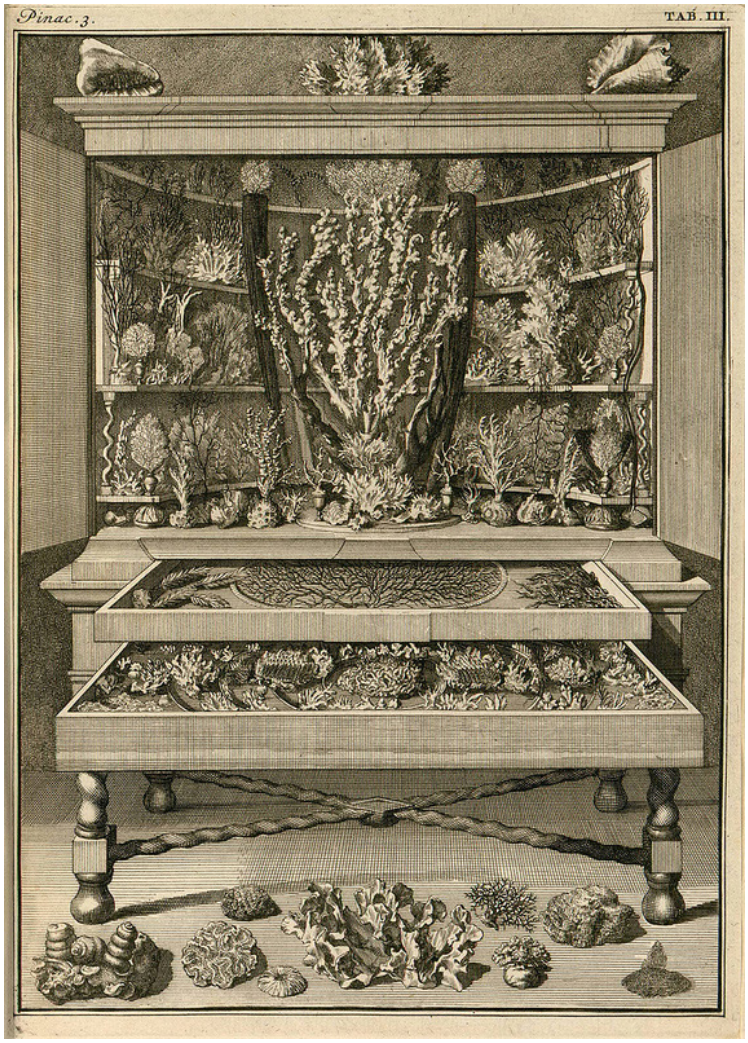

Figure 11. Illustration of a coral cabinet, (1706).

Figure 12. Helen Paterson Allingham, *Gathering Ferns*, (1871).

Figure 13. Illustration from the magazine *Weekly Welcome*, (1879).

Omnium Gatherum

This inexhaustible desire for collecting nature precipitated a series of crazes across Britain, Europe and America. In 1864, architect Robert Kerr stated that the era was one of *Omnium Gatherum*,[273] a dog Latin phrase meaning *to collect everything*. Jean-Louis Comolli argues that:

> The second half of the 19th century lives in a sort of frenzy of the visible. It is, of course, the effect of the social multiplication of images… The effect also… of something of a[n]… extension of the field of the visible and the representable: by journeys, explorations… the whole world becomes visible at the same time that it becomes appropriable.[274]

By mid-century, with new devices to keep specimens alive, collecting crazes diversified from natural remnants like fossils and shells to living examples. The Wardian Case precipitated an obsession for the collection and keeping of plants. This was epitomised by pterdiomania[275] or fern-fever, as well as orchid collecting, sometimes referred to as orchidelirium.[276]

When English naturalist Philip Henry Gosse published his book *The Aquarium: An Unveiling of the Wonders of the Deep Sea* in 1854, Europe was gripped with aquarium mania. Gosse's book was part do-it-yourself manual with detailed instructions on how to build an aquarium, and part educational, recording his observations of aquatic life. Integral to the book's success were the high quality images, printed using new chromolithographic techniques. Until recently these images were attributed to Gosse himself, whose father was an itinerant miniature painter.[277] They are now increasingly acknowledged to be the unaccredited work of his wife, Emily Bowes Gosse, who studied painting with John Sell Cotman [278] (Figures 14, 15). The scale of the craze *The Aquarium* caused can in some way be gauged by the sensational sales of the book, which earnt Gosse around £805,[279] equivalent to £94,000[280] or AUD $165,000[281] today.

273 Robert Kerr quoted in Barber, *The Heyday of Natural History*, 152.

274 Comolli, "Machines of the Visible," 109.

275 Barber, *The Heyday of Natural History*, 112.

276 Mabey, *The Cabaret of Plants*, 298.

277 Barber, *The Heyday of Natural History*, 240.

278 Gates, *Kindred Nature*, 74.

279 Brunner, *The Ocean at Home*, 54.

280 "Historical UK Inflation Rates and Calculator." Stephen Morley Historical UK Inflation, accessed 12 September 2017, http://inflation.stephenmorley.org.

281 "XE Currency Converter." Live conversion rates, accessed 13 December 2017, http://www.xe.com/currencyconverter/convert/?Amount=94%2C000&From=GBP&To=AUD

Figure 14. Emily Bowes Gosse, (unattributed), *The Plumose Anemone*, (1854).

Figure 15. Emily Bowes Gosse, (unattributed), *Plate V*, (1860).

The World under Glass

Also essential to this obsession with nature was glass, used simultaneously to protect and display.[282] The developments in sheet or plate glass manufacturing and the repeal of the glass tax in Britain in 1845 allowed for the wide spread use of glass in building and manufacturing,[283, 284] transforming both public and domestic space. Cities were renewed with glass arcades, windows and facades and crowned with spectacular glass theatres such as The Crystal Palace, built for The Great London Exhibition of 1851 (Figures 16, 17, 18).

Showcasing the technical and industrial inventions of the age, The Crystal Palace was also akin to a "glass ark,"[285] filled with botanical and animal specimens collected from around the world. In the home, miniature equivalents became essential objects combining education, decoration and entertainment. By mid-century, parlours became increasingly adorned with small glass theatres in the form of Wardian Cases, display cabinets, terrariums and aquariums.[286]

Figure 16. Philip Henry Delamotte, *Crystal Palace, General view from the Water Temple,* (1854).

282 Olalquiaga, *The Artificial Kingdom*, 52.

283 Mabey, *The Cabaret of Plants*, 259.

284 Brunner, *The Ocean at Home*, 38.

285 Mabey, *The Cabaret of Plants*, 253.

286 Barber, *The Heyday of Natural History*, 13.

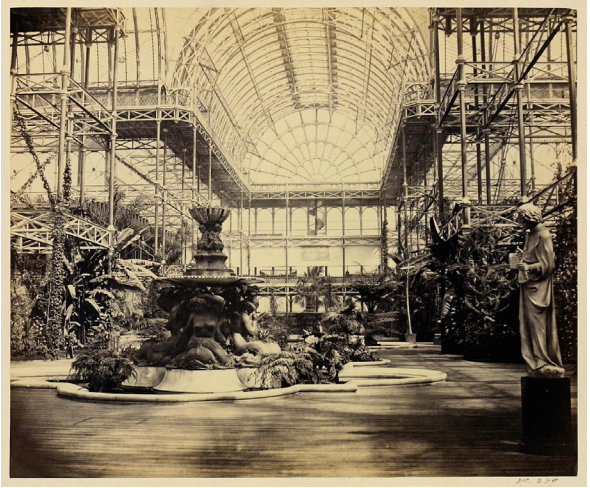

Figure 17. Philip Henry Delamotte, *Interior view: Crystal Palace*, (1854).

Figure 18. Philip Henry Delamotte, *The Great Nave, Crystal Palace*, (1854).

The Museum Movement

The popularisation of natural science also precipitated a movement to establish institutions in which to house, classify and study large natural collections. From the middle of the century, public aquariums, botanical gardens and natural history museums were established across the world in Britain, Europe, America, Asia and Australia. These included the first London aquarium opening in Regents Park in 1853, followed by numerous aquariums across Europe and the United States in the 1860s and 1870s.[287] New botanical gardens were built in the United Kingdom and Europe, including Kew Gardens, established in 1840, with the glasshouses of The Palm House and The Waterlily House added soon after to display and maintain exotic and tropical plants (Figures 19, 20, 21). By the end of the 19th century, Australia also had around 30 botanical gardens[288] including The Royal Botanical Gardens Sydney, Geelong Botanical Gardens and the Adelaide Botanic Garden (Figure 22).

The natural history museums that formed in Europe and Britain, such as The British Museum of Natural History in 1881, tended to favour scientific research and as a result the diorama was not a common display technique in Britain and mainland Europe.[289] Instead, the habitat diorama flourished in two very distinct geographical regions, Scandinavia and the United States.[290] In these locations, museums were more focussed on the instruction, education and entertainment of the non-academic public.[291] Dioramas solely arising in these countries can be related to several factors, the first being that wilderness areas in Nordic countries and the United States remained relatively untouched in comparison to the loss and absence of wild places in parts of Europe. In these countries landscape also formed a strong sense of national identity.[292, 293] Finally, Wonders links this trend to the beginnings of an environmental consciousness:

287 Brunner, *The Ocean at Home*, 105-131.

288 Murray Fagg, "A Brief History of Botanic Gardens in Australia," last updated 5 April 2016. Australian National Herbarium, accessed 23 December 2017, https://www.anbg.gov.au/botanic-gardens/history-botanic-gardens-in-aust.html.

289 Wonders, "Habitat Dioramas," 10.

290 Stephen Christopher Quinn, *Windows on Nature: The Great Habitat Dioramas of the American Museum of Natural History*. (New York: Abrams, 2006), 13.

291 Ibid., 9-11.

292 Wonders, "Habitat Dioramas," 225.

293 Quinn, *Windows on Nature*, 13.

> … [A] more direct and greater awareness of the conquest and degradation of the natural environment by humans… produc[ing] a… greater desire to impart to the museum public an appreciation of the natural-national heritage that was being damaged, diminished or lost altogether.[294]

Paradoxically, the fascination with nature during the 19th century also caused wide-ranging destruction of species and environments. By the early 20th century many species of animals, plants and well as ecological systems were decimated due to indiscriminate collecting and hunting.[295, 296, 297, 298] However, a greater awareness of the impact that human activities had on the environment grew during the early part of the 20th century, gaining in strength throughout the 1900s to form the ecological movement by the mid-20th century. Now, museums and institutions must adhere to strict environmental impact and ethics policies for the collection and preservation of species for museum collections.[299]

Since the 19th century museum movement, these institutions have evolved to become more integrated into scientific systems of knowledge and research, while simultaneously becoming more actively engaged with raising the public's awareness regarding environmental issues. Most are actively involved in education, preservation, protection and conservation research. Within these institutions these arenas also continue to function as vehicles to contemplate the spectacle of nature.

294 Wonders, "Habitat Dioramas," 10.

295 Sarah Whittingham, *Fern Fever: The Story of Pteridomania*. (London: Frances Lincoln, 2012), 93-7.

296 Brunner, *The Ocean at Home*, 139-40.

297 Quinn, *Windows on Nature*, 15.

298 Mabey, *Cabaret of Plants*, 300-303.

299 An example of the code of ethics for the collection and preservation of animal and plant remains in museums and research institutions can be seen in the International Council of Museums (ICOM), "Code of Ethics for Natural History Museums," accessed 3 January 2018, http://icom.museum/uploads/media/nathcode_ethics_en.pdf.

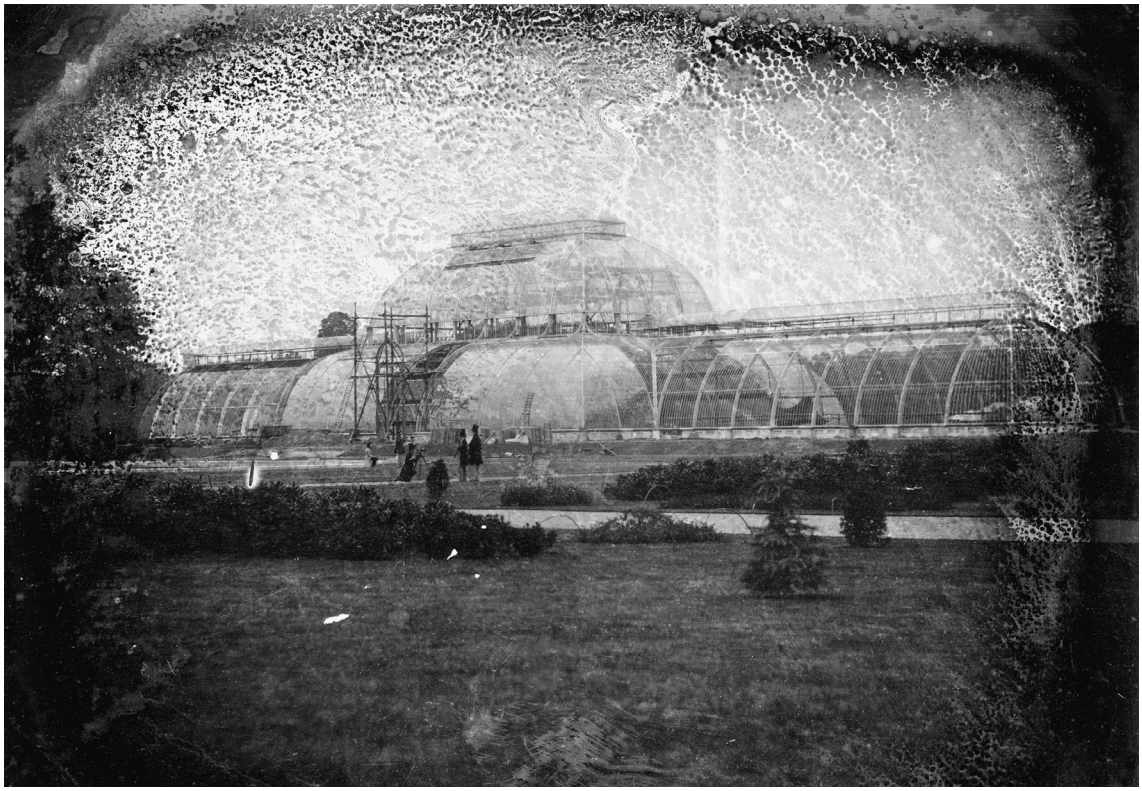

Figure 19. Antoine François Jean Claudet, *Exterior of the Palm House, Royal Botanic Gardens Kew*, (1847). This daguerreotype shows the Palm House in the final stages of construction.

Figure 20. *The Palm House, Kew Gardens*. Photo: Jim Linwood, (2008).

Figure 21. *Interior view of the Palm House, upper level, Kew Gardens.* Photo taken on fieldwork, August 2016.

Figure 22. Charles Rudd, *Fernery in Geelong Botanic Gardens*, (1892-1902).

The Virtual

The botanical glasshouse, aquarium and habitat diorama share commonalities with the world of images via the notion of the virtual. Rob Shields proposes a general definition of the virtual as "'*that which is so in essence*' but not actually so."[300] The terms virtual, virtuality and virtualism have complex and diverse cultural readings, further complicated by an almost synonymous association in contemporary culture with the digital.[301] Theorist Or Ettlinger proposes the virtual can encompass a variety of terms including digital, as well as potential, perceptual, metaphysical and imaginary.[302] David Summers suggests that virtual spaces are always images on a surface,[303] but he thus fails to recognise the wide variety of virtual spaces that we experience in everyday life.

Writers such as Anne Friedberg, Nicholas Mirzoeff and Rob Shields argue that today's digital and technologically mediated world "... draws on and repeats historical forms of the virtual."[304] The term virtual therefore has increasingly been used retrospectively, to explain experiences such as the acoustic virtuality of talking to someone on the telephone,[305] the imaginative virtual space of book reading as well as looking at images.[306] As Anne Friedberg concludes:

> ... [B]efore the digital age, there was virtuality—painterly, photographic, cinematic and televisual—and its aesthetics and visual systems cannot be reduced simply to information. There is a long pre-history to the "virtual"... mirrors, paintings, images produced by the camera obscura, photographs, and moving-picture film all produce mediated representations in a "virtual" register.[307]

Virtuality is thus a complex and abstract notion for which there is no all-encompassing or fixed definition. Anthony Bryant and Griselda Pollock demonstrate this difficulty by explaining the virtual as a contranym, a word that signifies its opposite. Therefore, the virtual means "not

300 Shields, *The Virtual*, 42-43.

301 Friedberg, *The Virtual Window*, 7, 11.

302 Ettlinger, "Like Windows to Another World," *Leonardo*, 252.

303 David Summers, *Real Spaces* (London: Phaidon, 2003), 43.

304 Shields, *The Virtual*, 2.

305 Nicholas Mirzoeff, *The Introduction to Visual Culture* (London and New York: Routledge, 1999), 91.

306 Martin Lister, Jon Dovey, Seth Giddings, Iain Grant and Kieran Kelly, *New Media: A Critical Introduction*, 2nd ed. (London and New York: Routledge, 2009), 36.

307 Friedberg, *The Virtual Window*, 11.

really existing" and yet, at the same time, "almost the same."[308] Nicholas Mirzoeff describes the virtual as "an image or space that is not real but appears to be…"[309] while William Sherman characterises the virtual as "an imaginary space often manifested through a medium."[310] Rob Shields argues that the virtual can "trick… the mind and body into feeling transported elsewhere,"[311] whereas for Frank Biocca the virtual is "more like a psychological variable"[312] where "the user feels *present*"[313] in an environment. These various definitions all involve four features of the virtual significant for my research, those of simulation, immersion, presence and liminality. I will outline how each of these elements applies to my studio processes and to my themes.

Simulation

The virtual is nearly always associated with a simulation, a space or image that appears to be physically present, but is actually a representation. The term simulation in contemporary usage is often associated with the digital, referring to environments that are manufactured through computer software, such as flight simulators or virtual reality games. However, a more historical definition of simulation refers to a "representation or imitation of something."[314] Habitat dioramas, aquariums and botanical glasshouses present simulated recreations of specific ecosystems like reefs, forests or deserts; representations or models of the natural environment, placed within a built architectural space. Similarly, an illusionistic painting might deftly simulate a representational space, but that space is imaginary. The monotype is an interesting case, as it is a mirror image of the original scene. Mirroring constitutes a kind of simulation; reversed from left to right, the mirror image "does not correspond to any reality, even if it creates… a faithful reproduction"[315] because the mirror image is always a simulation of the actual.

308 Anthony Bryant and Griselda Pollock, eds. *Digital and Other Realities: Renegotiating the Image* (London: I.B. Tauris, 2014), 11. ProQuest Ebook Central.

309 Mirzoeff, *Introduction to Visual Culture*, 91.

310 William R. Sherman and Alan B. Craig, *Understanding Virtual Reality: Interface, Application, and Design* (San Francisco, CA: Morgan Kaufmann, 2003), 7.

311 Shields, *The Virtual*, 11.

312 Frank Biocca, "Communication Within Virtual Reality," *Journal of Communication* 42, no. 4 (Autumn 1992): 6.

313 Ibid.

314 *Oxford English Dictionary Online*, s.v. "simulation," accessed 13 September 2017, http://www.oed.com.virtual.anu.edu.au/view/Entry/180009?redirectedFrom=simulation#eid

315 Sabine Melchior-Bonnet, *The Mirror: A History*, trans. by Katherine H. Jewett (New York: Routledge, 1994), 104.

Immersion

Virtual spaces produce a sense of immersion, of being transported into them. Immersion is generally understood as an involvement or absorption in some action, condition or interest.[316] Oliver Grau stipulates that immersion is exemplified by "diminishing critical distance to what is shown and increasing... involvement in what is happening."[317] Immersion is often experienced through illusionism. For example, David Jay Bolter concludes that Renaissance paintings create immersion through illusionistic tropes that "convince the viewer that he or she is occupying the same visual space as the object in view"[318] (Figure 23).

Immersion can also be experienced through mediated images, photographs, television and cinema, through the suspension of the viewer's disbelief, so that the virtual world replaces the actual world.[319] In contrast, other immersive experiences like reading may not require any external visual input, but generate immersion through internal images in the mind and imagination of the reader.

A sense of immersion is created within botanical glasshouses, aquariums and dioramas as these sites employ various architectural features such as viewing windows and alcoves to enclose spaces. These limit extraneous visual information that can interfere with illusion. For example, in dioramas and aquariums, alcoves and windows limit the viewer's sight lines and create "a wholeness of setting."[320] (Figure 24).

This can also be experienced in botanical glasshouses, as they are fully encased environments. This immersion from wholeness of setting can be extrapolated from the philosophical concepts of Jean Bodin[321] and the Renaissance idea of the 'theatre of nature,' which Ann Blair describes as:

316 *Oxford English Dictionary Online*, s.v. "immersion," accessed 13 September 2017, http://www.oed.com.virtual.anu.edu.au/view/Entry/91885?redirectedFrom=immersion#eid.

317 Oliver Grau, *Virtual Art: From Illusion to Immersion*. (Cambridge Mass. and London: The MIT Press, 2003), 13.

318 David Jay Bolter, "Virtual reality and the Redefinition of Self," in *Communication and Cyberspace: Social Interaction in an Electronic Environment*, Lance Strate, Ronald Jacobson, Stephanie B. Gibson eds (New Jersey: Hampton Press, 1996), 113.

319 Lister, *New Media*, 36.

320 Wonders, "Habitat Dioramas," 207.

321 Jean Bodin was a French 16th century natural philosopher, whose treatise *Universae naturae theatrum* (1596), proposes close connections between natural philosophy, humanistic science, experience and religious knowledge. See Ann Blair, *The Theatre of Nature: Jean Bodin and Renaissance Science* (Princeton New Jersey: Princeton University Press, 1997), 3-8.

Figure 23. Andrea Pozzo, *Glorification of Saint Ignatius*. (1691-94). Ceiling fresco in the nave of Sant'Ignazio di Loyola, Rome. Using trompe l'oeil techniques on the flat surface of the ceiling, Pozzo extends the building's architecture, generating an illusion of the vault of the church opening out to the heavens. Image credit: Bruce McAdam, (2009).

> … [A] complete and coherent view of the world in one gaze… where the viewer's task is not to act out a role but to watch and contemplate… the spectator is still part of the scene, ambiguously both observer and participant.[322]

Judith Hamera proposes that aquariums and dioramas demonstrate immersive theatre-like qualities through this relationship to the notion of the theatre of nature.[323] I would argue glasshouses possess similar qualities, producing parallel viewer experiences.

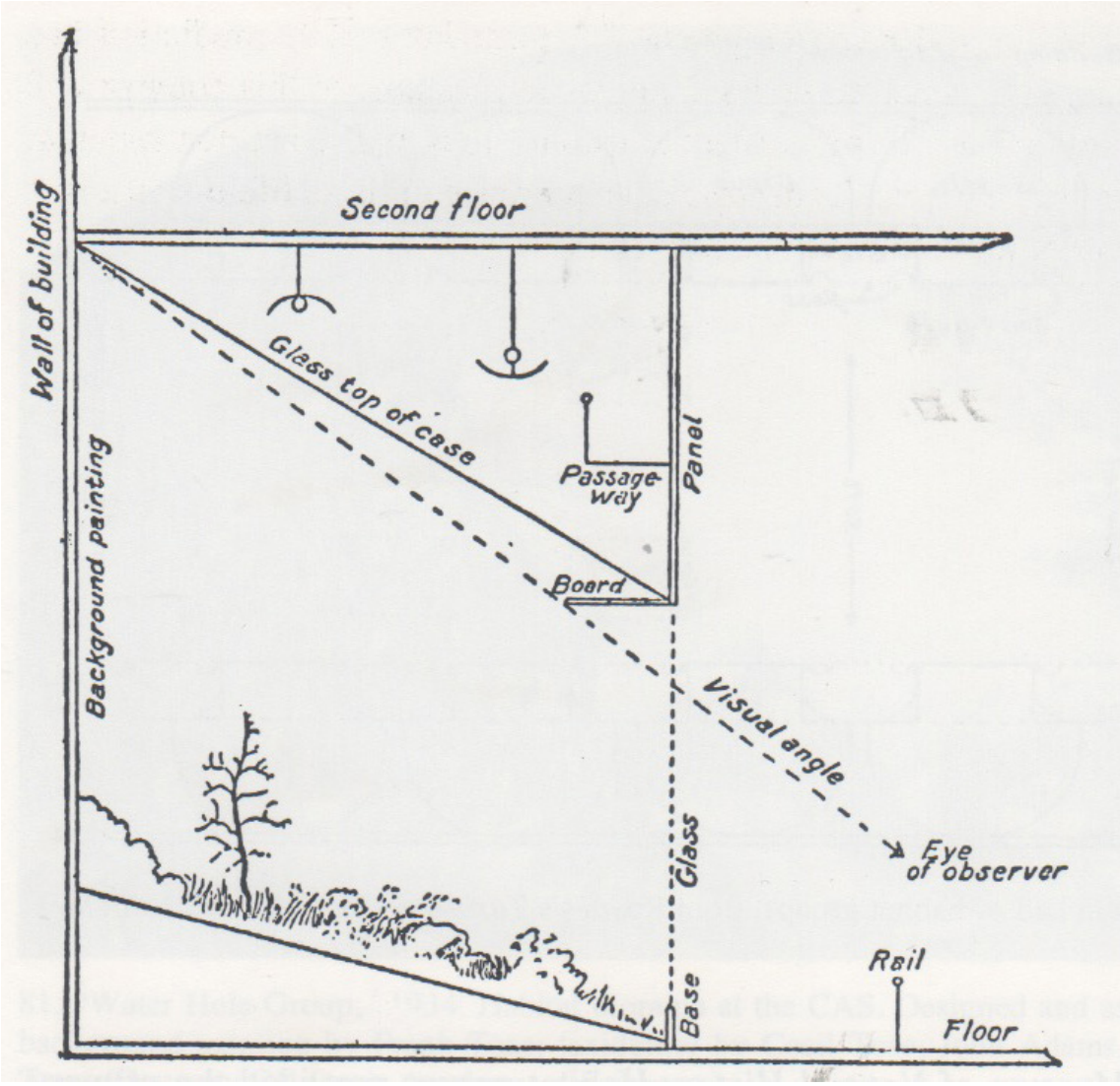

Figure 24. Profile view of a habitat group design published in John Rowley's *Taxidermy and Museum Exhibition*, (1925).

322 Ann Blair quoted in Judith Hamera, *Parlor Ponds: The Cultural Work of the American Home Aquarium, 1850-1970* (Michigan: University of Michigan Press, 2012), 28.

323 Hamera, *Parlor Ponds*, 28.

Presence

The virtual produces complex notions of presence. Frank Biocca proposes that viewers or users of virtuality can feel as if they are physically present in three spaces: the physical environment, the virtual space and a space of mental imagery within the mind.[324] Biocca emphasises that these conditions of presence are unstable and fleeting, which creates an oscillation between each of these three spaces.[325]

For example, when a person contemplates an image, such as a painting, the sense of presence moves between the viewer's physical body in actual space, the virtual space of the image and the internal space of the viewer's mind. When the viewer's presence resides within their mental imagery space, they experience the image through internal images, association, imagination and memory. However, when the state of presence oscillates back to the physical space, the viewer also understands the image through the body, the physical surface of the image, corporal sensations and embodied experiences other states of presence have produced. As these states of presence continue to fluctuate, an intricate sense of physical, virtual and internal understanding is mediated through the experience of the image. I propose that the same notions of presence can apply to any virtual space, such as aquariums, habitat dioramas and glasshouses, as well as to my own studio research.

324 Frank Biocca, "Can we resolve the book, the physical reality, and the dream state problems? From the two-pole to a three-pole model of shifts in presence" (draft of invited talk presented at the EU Future and Emerging Technologies, Presence Initiative Meeting, Venice, 5-7 May 2003), 5, http://www.mindlab.org/images/d/DOC705.pdf (accessed 12 September 2017).

325 Ibid., 7-8.

Liminality

Finally, the virtual is often a liminal space, an interstitial zone between the physical world and an imaginary environment and is implicit in the experience of the aquarium and diorama. The virtual nature of the aquarium and diorama is emphasised through their spectatorial liminality,[326] with the viewer physically suspended outside of the virtual space through the glass casement of display. This produces a virtual bodily experience, a sense of "an oscillation between closeness and distance, between wanting to enter the scene and being placed outside it..."[327] The world of images also reveals similar liminality, as the threshold of the pictorial window can be traversed only through sight.

The liminal aspects of the glasshouse operate in a slightly different way. While the glasshouse is constructed as a discrete space, distinct from the landscape that surrounds it, it can also appear continuous with the external environment through the transparency of its glass boundaries. The experience of the glasshouse therefore moves between a sense of containment and a dissolving border, melding the interior space of the glasshouse with that of the outside world.

326 Hamera, *Parlor Ponds*, 28.

327 Michelle Henning, *Museums, Media and Cultural Theory* (Maidenhead: McGraw-Hill Education, 2005), 33.

Virtual Windows

Alberti first introduced the metaphor of the pictorial window in his 1435 treatise on painting *Della pittura/De pictura*, where he instructed the painter to consider the frame of the painting like an open window.[328] Since then, the pictorial window has persisted as a figurative reference to the rectangular frame of the picture plane,[329] and as a transparent veil or screen used to construct perspectival images.[330] The nature of this window is perceptually ambiguous as it acts as both a frame and a way of seeing through the frame into the pictorial or illusionary space within it. Michael Kubovy describes the pictorial space within this window as a virtual space,[331] and Anne Friedberg proposes that the pictorial window as well as the related visual devices of the frame and the screen are actually virtual windows,[332] which imply "both a metaphoric window and an actual window with a virtual view."[333]

In the world of images, the virtual window is bordered by the edges of the picture plane, whereas in the aquarium and habitat diorama, the virtual window is formed by a transparent glass casement that frames a view. In both, the trope of the window can be argued to be a physical structure and a virtual threshold to an imaginative world beyond the frame (Figure 25).

Figure 25. The pictorial liminality of painting is similar to the aquarium and diorama display. Visitor in front of Claude Monet's *Nymphéas*. Musée de l'Orangerie, Paris. Photo taken on fieldwork September 2016.

328 Leon Battista Alberti, *On Painting*, trans. Cecil Grayson (London: Penguin Books, 1991), 54.

329 Friedberg, *The Virtual Window*, 1.

330 Alberti, *On Painting*, 65.

331 Michael Kubovy, *The Psychology of Perspective in Renaissance Art* (Cambridge and New York: Cambridge University Press, 1986), 23.

332 Friedberg, *The Virtual Window*, 12.

333 Ibid.

Figure 26. *The Nesting Cliff diorama, exterior.* Natural History Museum, University of Oslo, Norway. Photo taken on fieldwork, August 2016.

Figure 27. *The Nesting Cliff diorama, interior.* Natural History Museum, University of Oslo, Norway. Photo taken on fieldwork, August 2016.

Stephen Quinn states that the habitat dioramas that first incorporated two and three-dimensional elements introduced the viewing public to an early form of virtual reality,[334] through a "window-like frame or theatre-like proscenium that limits sight lines and conceals peripheral vanishing points"[335] to create "windows on nature"[336] (Figures 26, 27). Judith Hamera argues that "[t]he sheer number of references to the aquarium as a window… suggests that the latter functions as perceptual training for the former."[337] The affinity of the aquarium tank to a transparent glass window allows it to operate like a picture, as both a way to frame a view and as an aperture through which to see the aquatic world contained within it[338] (Figure 28).

Figure 28. *The Coral Reef Aquarium*, The Blue Planet Aquarium, Copenhagen, Denmark. Photo taken on fieldwork, September 2016.

334 Quinn, *Windows on Nature*, 10.

335 Ibid., 12.

336 Ibid., 22.

337 Hamera, *Parlor Ponds*, 24.

338 Ibid., 24-5.

Multiplied Windows

The motif of the window had become a repeating feature of my research. The virtual window was a key aspect of my subject matter as well as being integral to each stage of my studio process. The window was present in the aperture of the camera, the digital viewfinder, the computer screen, the photographic print, the photocopier, the photocopy, the transparent plastic plate, the painted picture plane, the sheet of paper and the completed monotype.

This multiplicity of windows became metaphorically and materially incorporated into my images. With the compression of the painted plate under the press roller, the windows became physically embedded, absorbed and flattened into the monotype surface. I likened these multiplied windows to the windows or nested tabs in the mediated interface of the digital screen: windows within windows, spatial illusions that were paradoxically compressed into a flat picture plane. This quality of embeddedness and multiplicity had implications for the reading of these images, as Friedberg argues:

> … [A] "windowed" multiplicity… implies new laws of "presence"—not only here and there, but also *then* and *now*—a multiple view—sometimes enhanced, sometimes diminished…[339]

These monotypes can therefore be viewed as documents of physical presence – both past and present, as well as embodiments of temporal and spatial elasticity.

339 Friedberg, *The Virtual Window*, 4-5.

Indexicality

While my studio processes of digital photography, painting and monotypes all exhibit indexical qualities, my subject matter, the aquarium, diorama and glasshouse, all display indexical characteristics through their relationship to the virtual.

This project acknowledges variances within the definition of the index. Differences in position and emphasis within the notion of the index occur across divergent fields of practice and theory. While my ideas have been informed by semiotic theory, they have also been influenced by writing specific to practice-led interpretations of the index relating to the production of the monotype.

Indexicality is one of three types of signs introduced by Charles Sanders Peirce, an American philosopher working in the field of semiotics.[340] Peirce's renowned triad of signs include the indexical, the iconic and the symbolic,[341] with the iconic sign associated with resemblance and the symbolic sign concerned with custom, habit, law or culture.[342] The indexical sign is understood as a direct result of cause and effect,[343] such as the often-cited examples of smoke as an index of fire,[344] or a weathervane as an index of the direction of the wind.[345] Photographs are also considered to be indexical as they are traces of physical contact.[346] As Geoffrey Batchen explains:

> Light bounces off an object or a body and into the camera activating a light-sensitive [surface] and creating an image. Photographs are therefore designated as indexical signs, images produced as a consequence of being directly affected by the objects to which they refer. It is as if those objects… impressed themselves on the physical surface… leaving their visual imprint…[347]

Indexicality is a complex subject surrounded by an expansive field of rhetoric, informing a wide range of discourse within photographic theory. A long line of theorists including Walter Benjamin, Roland Barthes, Rosalind Krauss, Susan Sontag and Geoffrey Batchen have attempted to examine the intricacies of the photographic index. As photography expands with the ascent of digital technologies, the critical debate rages on.

340 Stephen Bull, *Photography* (London; New York: Routledge, 2010), 13-15.

341 Ibid.

342 Emerling, *Photography History and Theory*, 64.

343 Ibid., 10.

344 Ibid.

345 Bull, *Photography*, 15.

346 Kris Paulsen, *Here/There: Telepresence, Touch and Art at The Interface*. (Cambridge Mass. and London: The MIT Press, 2017), 19.

347 Batchen, *Forget Me Not*, 31.

Theorists such as W. T. J. Mitchell and Paul Willeman proclaim that the immateriality, reproducibility or malleability of the digital, severs the index from photography.[348, 349] Meanwhile Martin Lefebvre and Kris Paulsen argue that materiality is not a necessary attribute of indices[350] but instead, mediation and digitisation simply confirm the adaptability and fluid nature of the index.[351] Mary Ann Doane asserts that the digital adapts another sign system, that of mathematics and numbers,[352] instead of a chemical base for measuring the contact of the indexical trace.

Paulsen's deduction that the index now resides in the interface[353] is persuasive, and merges with Shields conclusion that virtual spaces are also indexical.[354] I contend that the virtual and the index operate in similar ways, as they both serve to stand in for the things they represent. In this sense, the aquarium, botanical glasshouse and habitat diorama therefore display both indexical and virtual qualities. The reference to the index in my research is additionally reinforced through my studio processes of digital photography, painting and monotypes.

Unlike the processes of digital photography, which Paulsen proposes as indexical, the studio processes of painting and monotypes are not traditionally considered indices. The relationship between photography and painting is often distinguished along the lines of indexicality,[355] photographs generally being defined as indexical while paintings and handmade images are assigned iconic status. However, it is clear that images are not simply either indexical or iconic, rather images tend to be a variable composite of signs. For example, representational photographs very often exhibit iconic, symbolic and indexical qualities all at the same time.[356] I would argue that paintings also possess qualities of indexicality, specific to their methods of production.

348 William J. Mitchell, *The Reconfigured Eye: Visual Truth in the Post-Photographic Era* (Cambridge Mass.: MIT Press, 1992), 6.

349 Paul Willeman quoted in Mary Ann Doane, "The Indexical and the Concept of Medium Specificity," *Differences*, 18, no. 1 (1 May 2007): 132, https://doi-org.virtual.anu.edu.au/10.1215/10407391-2006-025.

350 Paulsen, *Here/There*, 19.

351 Ibid., 37.

352 Doane, "The Indexical," 143.

353 Paulsen, *Here/There*, 37.

354 Shields states that virtual spaces are indexical by semiotic definition as they are 'interstitial', relating to the space or moment between one thing and another, see Shields, *The Virtual*, 49.

355 Hilde Van Gelder and Helen Westgeest, *Photography Theory in Historical Context: Case Studies from Contemporary Art* (Chichester: Wiley Blackwell Publishing, 2011), 33.

356 Paulsen, *Here/There*, 20.

Charles Sanders Peirce asserts that the indexical trace is counteracted by gesture[357] and, in this sense, images like paintings and drawings are excluded from being considered indexical. For John Berger however, drawn marks are a trace of bodily action and knowledge: "[to] draw is to know by hand."[358] Jae Emerling neatly summarises Mary Ann Doane's position regarding the index in photography as "a trace of movement, a gesture of touch."[359] As Batchen's previous quote illustrates, indexicality can be produced as one material presses against another, resulting in an imprint as evidence of that physical contact. This explanation of index as imprint is used by Johanna Love to demonstrate how images like drawings or paintings can be indexical:

> … the drawing is a mark that generates a new indexical reference to the presence of the body. Each drawn mark attests to the presence of the hand, through the pressure and weight of each… mark made… The drawing therefore acts like a fingerprint on the… surface, generating a new identity through the uniqueness of the… mark.[360]

According to Love therefore, paintings and drawing are indexical signs, not of the objects or subjects they signify, but rather they are the physical trace of the artist's body.

357 Peirce quoted in Emerling, *Photography History and Theory*, 63-64.

358 John Berger, *Berger on Drawing*, ed. Jim Savage. (Aghabullogue, Co. Cork, Ireland: Occasional Press, 2005), 102.

359 Emerling, *Photography History and Theory*, 64.

360 Johanna Love, "Somewhere between printmaking, photography and drawing: Viewing contradictions within the printed image," in *Journal of Visual Art Practice* 14, no. 3, (2015): 220, http://dx.doi.org/10.1080/14702029.2015.1094239.

The Index within an Index

The monotype, which is formed by one material (paper), physically pressing against another (painting), to leave a record, is essentially indexical[361] (Figure 29). Furthermore, as the monotype is a hybrid image, incorporating drawing and painting as well as a physical imprint, the monotype condenses and multiplies the relationship to the index.

Produced by the reflection of light bouncing off the objects and subjects within the sites of my subject matter, my source material photographs are indexical visual records. These images form the basis of my monotypes, which are not only an index of the painted surface; the painted surface is also an index of the painter's body. My research therefore results in multiple references to the index within the image of the monotype. Not only do my monotypes echo the notion of the virtual window, one window nested within another; my monotypes also multiply indices, creating indices within indices.

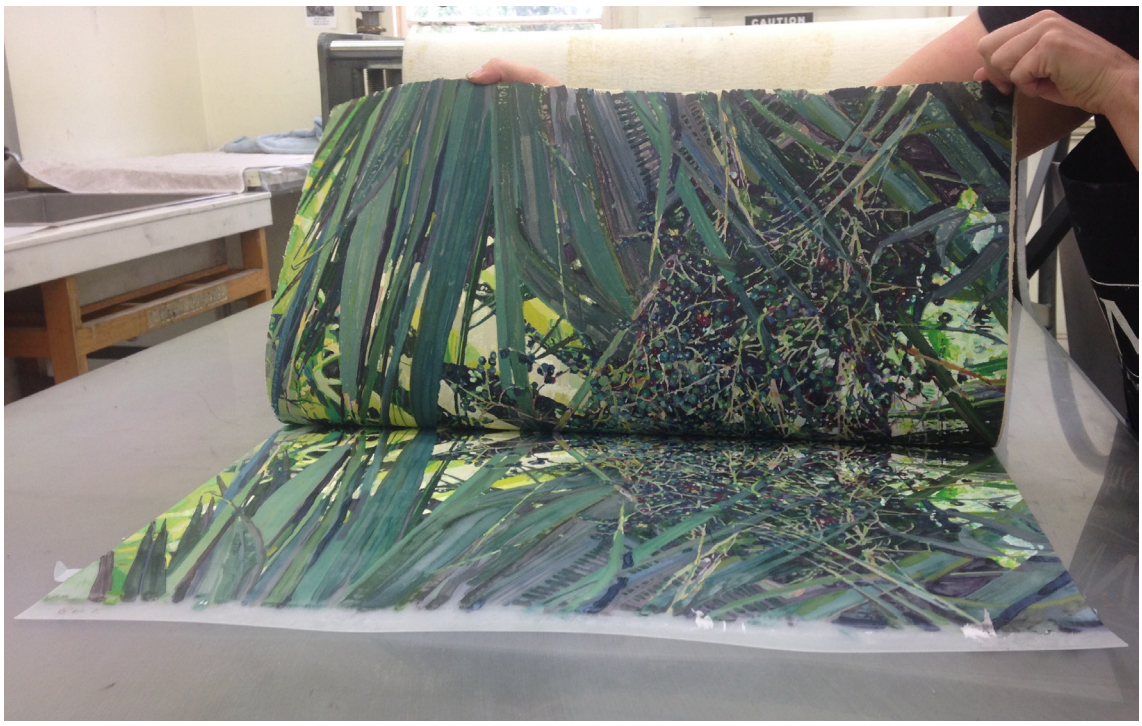

Figure 29. Studio shot *The New World (Arecales)*, showing the monotype being lifted off the plastic film, (2017). Photo: Tiffany Cole.

361 Hauptman describes the monotypes of Degas as indices of the image's own making, see Hauptman, "Introduction," in *Edgar Degas: A Strange New Beauty*, 15.

The New World

In response to this research on the indexicality and virtuality of the sites of my subject matter, I produced the series *The New World* after returning from fieldwork in Europe. I concentrated this series on the 19th century botanical glasshouses I had documented overseas. My aim was to trial different ways to reconfigure the space within these works using collage to test ways that texture could affect spatial relationships. I decided to experiment by using compositions with a larger vertical height, in contrast to the predominately thinner panoramic views I had made prior to this series. I thought this greater height would help create a sense of a more immersive space in relationship to the viewer's body. To achieve this compositional height in the collages I stacked spaces on top of each other, vertically from foreground to background.

While these new spatial configurations were successful, I felt that I had become almost too accomplished in my monotype technique, as most of the chance textures and information drop out was eradicated in the transfer process. I recognised that with fieldwork fresh in my mind, the collages became almost seamless. They seemed to be losing that quality of provisionality which had effectively conveyed my interest in the mutability of memory and human vision (Figures 30, 31).

My aim therefore, for a larger work from this series, *Wunderkammer* (Figure 32) was to produce a more open collage to create a less fixed depiction of space, as well as a looser application of paint to gain different textures. I achieved this by changing the pictorial depth of the photos through photocopying; increasing the scale of the image; using a large variety of brush sizes to change the scale of the painted marks within the image and by painting onto a more rigid plastic plate which was more resistant under the press.

Figure 30. *The New World (Zingiberales)*, (2017).

Figure 31. *The New World (Poales)*, (2017).

Figure 32. *Wunderkammer*, (2017).

Conclusion

In this final phase of my research, I examined my themes of the cultural spectacles of nature and the world of images, through notions of indexicality and virtuality. These highly curated and artificial re-enactments of nature (the aquarium, the greenhouse and the diorama) represent systems of knowledge and cultural organisation. In my work I find in the monotype an effective means of reflecting these reconstructions and illusions of nature in terms of both scale and space.

I now connected the recursive qualities of the *Rückenfigur* which I had researched previously (see Chapter 3), to both the windowed characteristics of virtual spaces and the repeated indexical properties of my studio processes. Therefore the sites of my subject matter also possess recursive qualities, as they depict a curated, contained world within the actual world.

I concluded that my resulting monotypes are paradoxical: temporally and spatially indeterminate, while simultaneously being physically delimited and materially flat.
My practice-led research therefore echoes the virtual and indexical nature of the world of images, mediating technologies as well as the sites that form my subject matter. Additionally, my monotypes echo qualities of the telepresent and televisual experience of the windowed world, which can be temporally and spatially complex as well as visually and perceptually uncertain.

CONCLUSION

Conclusion

This conclusion summarises the ways in which I have addressed my original research questions. My project set out to investigate the relationship between painting and photography within contemporary culture, with the primary aim being to investigate how the material processes of painting could be used to explore the significance and the implications of photography in relation to contemporary visual experience. With reference to the scholarship of Elizabeth Easton, Dorothy Kosinski and Aaron Scharf, I have also examined the historical precedents of this field of enquiry, concentrating on painters from the 19th century who negotiated a relationship with photography from the time of its invention. Additionally, my interest in the cultural sites of the aquarium, the botanical glasshouse and the habitat diorama, has prompted me to explore how these sites, as constructed spectacles of nature, were born out of the 19th century's expanded experience of the visible, and share social and visual qualities resonant with our experience of technologically mediated images in the 21st century.

My research evolved from a fascination with the visual qualities of photography and the visual and perceptual possibilities of translating photographs into other material forms such as painting. Recognising just how extensive this area of enquiry could be, I focussed on one particular process of painting, – the painted monotype; and one particular sub-genre of photography – the vernacular.

Through this process I have adopted formal and technical approaches to the monotype that bring this process into productive and significant relationship with vernacular photography, generating new readings of vernacular images, and of the monotype, within contemporary visual culture. My methodology has thus generated visual, perceptual and conceptual connections between vernacular photography and the painted monotype, and shown how painted monotypes, as handmade images, offer a unique reading of embodied experience through their material, visual and sensory qualities.

While the monotype is historically linked to the 19th century, I have found the monotype's hybridity and variety of form lends itself productively to contemporary practice. Historically, practitioners have used the monotype to interrogate the potential of materials, the hybridity of methodologies and to question depictions of pictorial space and art historical hierarchies. In a contemporary context, the monotype's hybridity continues to challenge these hierarchies, where the contemporary art object no longer requires strict adherence to rules or definitions of medium or form. Hayter contends that every artist effectively reinvents the monotype,[362] as techniques are not often strictly taught or explained, but rather individually rediscovered and developed by each new artist.[363] Therefore, the monotype can be seen to have a transhistorical aspect: an old medium that can be constantly remade anew.

The transhistorical nature of my research is also repeated in the themes and sites of my subject matter. The expansion of visual experience in the 19th century, and its accompanying visual entertainments such as the locations explored in my work, connect with and reiterate contemporary manifestations of the 'frenzy of the visible.' Today we experience these visual spectacles in daily life, through photography, the digital interface and the virtual world.

This research has been informed by the work of Édouard Vuillard, Mamma Andersson, Peter Doig, David Hockney and the landscapes of Gustav Klimt. These painters investigate the territory between painting and lens-based images through various aspects including visual perception, embodied vision and figure and ground relationships, and have been instrumental in developing my studio approach. Additionally, the works of Edgar Degas and Paul Gauguin have been significant to my understanding of the technical, material and perceptual aspects of the monotype.

362 Hayter, 26.

363 Ibid.

Fieldwork enabled me to experience significant botanical glasshouses, habitat dioramas and aquariums in Europe and the UK, as sites of contemporary spectacle and locations of historical significance in the 19th century. I was thus able to document these sites as imagery to build into my studio research. During fieldwork I viewed *Painting with Light*, the first major exhibition exploring the influence of photography on painting during the 19th century in the UK, which has contributed to my understanding of the historical relationship between painting and photography within a broader context. I was also able to see exhibitions by several contemporary painters who work with photographic source material, the most significant of these being Mamma Andersson whose approach has been highly influential to my studio practice.

The incorporation of collage and photocopying into my working process has contributed additional qualities of resonance between vernacular photography and the painted monotype relating to repetition, reversal and provisionality. This has brought greater complexity to my engagement with embodied human vision and memory. My use of collage reveals how the photographic image can be detached from one-point perspective and a fixed relationship to time, creating a sense of moving through a space. Collage thus evokes the mobile action of human vision, which scans and gathers information from separate glimpses accrued over time. The collage process also reflects the activity of memory, which is by nature unfixed and mobile. Therefore, while the spaces in my monotypes might appear somewhat realistic; like memories, they are part fact and part fiction. This is also reiterated by my choice of subject matter: sites that strive to recreate nature, while actually representing highly organised cultural illusions of the natural world.

Finally, I have compared how notions of indexicality and virtuality are played out in photography and in the painted monotype. The loci of my subject matter, the botanical greenhouse, aquarium and habitat diorama, have concentrated these qualities through their common virtual and indexical attributes. By examining concepts of the virtual with reference to the scholarship of Anne Friedberg, Rob Shields and Nicholas Mizoeff; and the indexical in relation to the writing of Geoffrey Batchen, Kris Paulsen and Johanna Love, I have discovered an oscillating sense of physical space and temporal experience within the monotype.

In spatial terms, this oscillation occurs between illusion and planarity; figure and ground; immersion and liminality; and a sense of a static picture plane and a simultaneous sense of movement through space. Similarly, the monotype produces an elastic sense of physical surface, recording the indexical physical gestures of the artist as well as the creation of serendipitous painterly marks. The monotype also establishes a fluctuating sense of temporality between the immediacy of the physical presence of the painted surface, the past moment of the photographic, and the continually renewing present moment of looking.

This research presents the monotype as a means of creating distinctive painterly textures that cannot be produced by direct painting. These textures serve to materially translate the visual qualities of vernacular photography and the image degradation that occurs through photocopying. These textures are in a sense illusory, being optical rather than physical, as the surface of the monotype is completely flat, and thus operate rather as painterly 'effects', underscoring the paradoxical qualities of the monotype.

The unpredictability and specificity of the monotype process has the potential to radically transform photographic images. First, while qualities like image erosion and information drop-out echo the visual textures of vernacular photography and the disruption of the image through copying, they also interrupt the traditional hierarchy of perspectival space and create an oscillation between planarity and illusion. Second, the compression of the material surface of the monotype forces figure and ground relationships to become embedded into each other, an effect which relates to and extends the operation of false attachment in photography. Finally, the surface of the monotype also possesses a porous quality, which brings a sense of provisionality to the work, echoing image erosion in photocopying and also repeating the instability of memory and the mobility of human vision.

The matrix of features and devices summarised above combine in my research to reveal the painted monotype as producing paradoxical visual, material, temporal and sensory characteristics which engage the experience of the photographic within contemporary visual culture. The unfixed notions of time and space evident in the monotype echo the temporal and spatial indeterminacy integral to the experience of vernacular photography mediated through the digital interface. The monotype reiterates this embedded and windowed

experience, suggesting new ideas of physical and temporal presence.[364] This research has led me to reconceive the monotype, transporting it from its historical location on the periphery, into a central dialogue with the experience of the vernacular photograph in contemporary visual culture.

In drawing out these pictorial devices and technical approaches to activate the relationship between painting and vernacular photography, I have refined the monotype process itself. I have, as Hayter asserts, reinvented the medium of monotype through my individual sensibilities and approaches to methodology.[365] My research combines a traditional approach to watercolour monotype with an extended painting phase, forming a unique, hybrid monotype/painting technique, placing my work firmly within the contemporary field of painting practice.

This durational shift has enabled my highly sustained engagement with, and delivery of imagery, which prompts an equally prolonged quality of attention from the viewer. These are complex images which can be slow to reveal themselves, threaded with intricate details and varied textures that form complicated spatial relationships. The surface of the works, which glitch and erode, reverberate with the virtuality, uncertainty and anxiety of contemporary experience.

As representations of contemporary cultural spectacle, the sites I have chosen are models through which I have explored how we visualise and experience nature more broadly within contemporary culture. My engagement with photography applied to these sites prompted my historical research into the 19th century, revealing it as an age of drastic changes in visual culture. Just as photography became popular, new visual entertainments offered equally new ways to understand visuality and images. I link these visual entertainments and the expanded experience of the optical during the 19th century transhistorically to the wider image-laden experience of contemporary visual culture in the 21st century. My research thus reveals the painted monotype as an effective means of synthesising complex themes of contemporary visual culture and as a material interface between the sustained attention of making and the sustained attention of looking.

364 Friedberg, *The Virtual Window*, 4-5.

365 Ibid.

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